



Roosevelt Row

Roosevelt Row Pedestrian Enhancements Project
Final Report
January 2007

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INTRODUCTION

The Roosevelt Row Pedestrian Enhancement Project was undertaken for the City of Phoenix. Project funding was provided to the City of Phoenix by the Maricopa Association of Governments (MAG). This project addresses the goal of revitalizing downtown Phoenix by establishing a distinct Art District, which will function as a safe and enjoyable pedestrian environment and a unique gateway to the downtown. Located between 2nd Avenue and 7th Street along Roosevelt Street in Central Phoenix, Roosevelt Row is becoming known as a location for special events including the popular 1st Friday event, which attracts significant numbers of participants each month. (see figures 1 and 2)

Currently, there is a mix of new development amongst the older established development on Roosevelt Row. Existing development includes several religious buildings and two new residential developments including Roosevelt Square (between 2nd Avenue and 1st Avenue) and Artisan Village (located between 5th Street and 7th Street). Other existing development includes old and new commercial and office buildings. There is public parking on-street and private parking lots associated with commercial and residential development. A Light Rail Transit Station is under construction at the intersection of Roosevelt Street and 1st Avenue.

The project limits include the streetscape along Roosevelt Street from 2nd Avenue to 7th Street, and the adjacent streetscapes associated with significant intersections. These include 2nd Avenue, 1st Avenue, Central Avenue, 3rd Street and 7th Street. There is existing right-of-way, which in many areas is sufficient to construct the project. However, additional right-of-way will be needed to fully implement the project recommendations.

Adjacent properties are privately owned or owned by the City of Phoenix. There is a significant amount of vacant, undeveloped land along Roosevelt Street. Vacant land has both a negative and a positive potential for enhancing the pedestrian environment along Roosevelt Row. Vacant land detracts from the aesthetic value of the streetscape and provides little for the pedestrian visitor to Roosevelt Row. Conversely, this land has potential for enhancement to the pedestrian environment. Some of the existing developed private properties are in varying states of disrepair.

Revitalization of Roosevelt Street is a key component in the successful establishment of Roosevelt Row as the heart of a distinct Art District in downtown Phoenix. Some portions of the streetscape have been upgraded with widened sidewalks, landscaped boulevards, shade trees and pedestrian scale lighting. However, the current streetscape is generally not pedestrian-friendly. Many sections of the streetscape are too narrow, do not offer shade, and do not meet MAG 2005 Pedestrian Policy and Design Guideline standards.

The main purpose of this project is to improve the pedestrian environment by providing pocket parks, larger, landscaped areas that include mature shade trees, wider sidewalks that are ADA accessible, and the addition of pedestrian amenities such as shade structures and lighting. The project will involve removal of existing streetscape features to provide room for large landscaped areas and wider sidewalks. There are existing features within the right-of-way including above ground utilities, which are primarily located on the south side of Roosevelt Street. The design concept will work with these features at to not disturb them. The proposed design does not involve undergrounding the overhead power

lines or removing the poles. However, some undergrounding has already taken place along Roosevelt Row in conjunction with new development. The design concept also respects the value of Roosevelt Street as a traffic connector and builds on the premise that pedestrians and vehicles can coexist comfortably in environments where pedestrian safety, comfort and enjoyment is a priority.

FIGURE #1:
Roosevelt Row Site Context

Roosevelt Row
Study Area context

Source: City of Phoenix Neighborhood Services Department accessed on the City of
Phoenix web site at <http://phoenix.gov/>

FIGURE 2:
Roosevelt Row Study Area Site

Roosevelt Row Study Area west section between 2nd Avenue to 3rd Street

Roosevelt Row Study Area east section between 3rd Street and 7th Street

BACKGROUND DATA

Existing Conditions

The Roosevelt Row site is in transition. Roosevelt Street, between 2nd Avenue and 7th Street, is a two-lane street, accommodating two-way traffic. The traffic lanes are separated by a center turning lane. Roosevelt Street, from 2nd Avenue to 1st Avenue, is relatively narrow. Currently, there is a painted parking/turning zone on the curb sides and/or in the center lane of Roosevelt Street from 2nd Avenue to 7th Street (Photo #1). Concrete pedestrian walkways are located on both sides of Roosevelt Street along Roosevelt Row. All intersection crossings within the Study Area are ADA compliant where required. However, some of the walkways and ramps are in poor condition and in need of replacement. (Photo #2).

Photo #1: Existing painted zones on roadway designate on-street parking and turning lanes (looking west along Roosevelt Street at 1st Avenue)



The sidewalks associated with the new Roosevelt Square and Artisan Village developments are compliant with MAG Pedestrian Policies and Design Guidelines (Photo #3). Older sections of sidewalk along Roosevelt Row are not. Many walkways are less than the recommended minimum 8' width and are not separated from vehicular traffic by landscaped boulevards that could provide adequate buffering from automobiles (Photo #4). Very little shade is provided for pedestrians. As mentioned, vacant lands along Roosevelt Street offer constraints and opportunities for creating a safe and vibrant pedestrian environment along Roosevelt Row (Photo #5).

Initiatives are occurring, which may significantly and positively impact the quality of Roosevelt Street as a pedestrian environment. A new Light Rail Transit Station (LRT) is planned at Roosevelt Street and First Avenue. Construction is now under way (Photo #6). This LRT station is scheduled to open in February 2008. An innovative 'dynamic' shade canopy structure system is the main feature of the Roosevelt station. The design concept for the LRT station is pedestrian scale reflecting the Transit Oriented Development (TOD) urban design philosophy, which encourages pedestrian scale urban design promoting mixed use development consistent with the desired character of Roosevelt Row. New mixed commercial and residential development is also occurring in a manner intended to reinforce the positive characteristics of this site as a pedestrian friendly environment.

Photo #2: Pedestrian ramps on Roosevelt Row in need of repair (Roosevelt Street at 3rd Street looking east)



Photo #3: Artisan Village on north west corner of Roosevelt Street and 7th Street (view along north side of Roosevelt Street looking towards 7th Street)



Photo #4: Existing below standard sidewalks along Roosevelt Street (view along south side of Roosevelt Street looking west towards Central Avenue, showing walkway that is too narrow and not separated from vehicular traffic)



Photo #5: Vacant land on South side of 3rd Street and Roosevelt Street (looking east along Roosevelt Street at 3rd Street)



Photo #6: Construction of the Light Rail Transit Station at Central Avenue and Roosevelt Street



Existing Land Use

Existing land use on Roosevelt Row varies with the location along Roosevelt Street. Throughout the site significant areas of vacant land are interspersed with old and new development (Photo #7). The western and eastern ends of the study area are more residential than the central portions of the street. This consists of a combination of older residential housing and residential redevelopment that has recently occurred in these locations. Specifically, Roosevelt Square (located between 2nd Avenue and 1st Avenue) and Artisan Village (located between 5th Street and 7th Street) are new residential developments. Roosevelt Square is located on the corner of Roosevelt Street and 1st Avenue. Artisan Village is mixed residential and commercial development. Across from Roosevelt Square, there are several offices located on the south side of Roosevelt Street. The area between Central Avenue and 5th Street is a mix of institutional and commercial land uses. This area contains much vacant land. Roosevelt Community Church (located at the corner of Roosevelt Street and North 1st Street) is on the Phoenix Historic Property Registry and is eligible for listing in the National Registry of Historic properties (NRHP).

Existing Zoning

Zoning within the study area reflects the transitional nature of Roosevelt Row (see Table #1). Roosevelt Square is zoned R5 Multiple Family Residential. On the south side of Roosevelt Street, in this area, the lands are zoned R5 and C2/HRI. The lands on the north side of Roosevelt Street between 1st Avenue and 5th Street are zoned HRI. The lands on the south side between 1st Avenue and 5th Street are zoned C2/HRI. Artisan Village, at the west end of the study area, is zoned C2/HRI, combined High Rise Incentive and Mixed Use (combined with underlying C2 commercial zoning). This development complex offers up-scale condominiums and additional commercial development fronting along Roosevelt Street. A gas station and several existing businesses are currently located on the south side of Roosevelt Street across from the Artisan Village development.

Photo #7: Vacant lands on south side of Roosevelt Street at 3rd Street



Table #1: Study Area Zoning

Zoning	Zoning Description	Uses Allowed
C2	Commercial – Intermediate commercial	Commercial uses of medium intensity designed to be compatible with each other and to provide a wide range of commercial activity
HRI	High Rise Incentive – High Rise and Mixed Use (combined with underlying zoning)	HRI zoning combines High Rise development with other types of development
C2 - HRI	Intermediate Commercial / High rise Incentive zoning	HRI zoning on Roosevelt Row combines High rise development with commercial development (C2)

Source: City of Phoenix Planning Department documents [Map F8](#) and [Zoning Districts With brief Descriptions](#)

Demographics

The Roosevelt Row study area is located within City of Phoenix Council District 7 and 8. Census data for this area is taken from the [2000 US Census Summary File 3, Profile of General Demographic Characteristics: 2000](#). This data indicates that the study area population is 335,563 individuals, living in the two Council Districts. This population is comprised of 52.4% male and 47.6% female residents. Minority races comprise 48% of the total population, with people of Hispanic or Latino origin comprising 34.5% of the total population of the two Districts. (see table #2)

Table #2: Demographic Characteristics Comparing Study Area to City of Phoenix

Race	Study Area	City of Phoenix
Total population by race	168,149	1,321,045
Hispanic or Latino (of any race)	106,794 (63.5%)	450,423 (34.1%)
White	89,937 (55.7%)	938,583 (73.5%)
Black or African American	11,960 (7.4%)	87,416 (5.3%)
American Indian & Alaskan native	3,378 (2.1%)	26,696 (2.1%)
Asian	2,071 (1.3%)	26,449 (2.1%)
Native Hawaiian & other Pacific Islander	157 (0.1%)	1,766 (0.1%)
Some other race	53,868 (33.4%)	216,589 (17.0%)
Two or more races	6,778 (4.0%)	43,276 (3.3%)

Source: City of Phoenix, US Census Summary File 3: Profile of General Demographic Characteristics: 2000

Construction Projects in the Area

As mentioned, a new Light Rail Transit (LRT) Station is currently under construction at Roosevelt Street and First Avenue. This LRT station is scheduled to open in February 2008. An innovative, “dynamic”, shade canopy structure system is the main feature of the Roosevelt Street station. The design concept for the LRT station is pedestrian scale reflecting the Transit Oriented Development (TOD) urban design philosophy, which encourages pedestrian scale design promoting mixed-use development consistent with the desired character of Roosevelt Row. New, mixed commercial and residential development is also occurring in a manner intended to reinforce the positive characteristics of this site as a pedestrian-friendly environment.

Relationship to Other Regional Documents

The study process examined relevant regional documents (including Web sites) and evaluated their relationship and importance to the Roosevelt Row site, as well as, the primary project goal to enhance the pedestrian environment along Roosevelt Street between 2nd Avenue and 7th Street. These documents are discussed below.

Bicycle and Pedestrian-Related Documents

Maricopa Association of Governments, MAG Pedestrian Policies and Design Guidelines 2005:

In 2005, the Maricopa Association of Governments produced the [MAG Pedestrian Policies and Design Guidelines 2005](#). The Roosevelt Row Pedestrian Connections Project is a derivative of the MAG Design Assistance Program. The [MAG Pedestrian Policies and Design Guidelines 2005](#) document references the [Mean Streets 2004](#) report, which emphasizes that pedestrian fatalities in the United States are alarmingly high. For example, the fatality rate per 100 million miles traveled in 2003 was 0.75 people using transit, 1.3 people using private vehicles, 1.2 people flying, and 20.1 people walking (Ernst, M. 2004. [Mean Streets 2004. How Far Have We Come?](#) Surface Transportation Policy Project).

The purpose of this MAG pedestrian policy document is to promote the development of safe, interesting, and enjoyable facilities for people to walk. The MAG pedestrian design guidelines and policies fall into two distinct categories: design principles and specific design guidelines. A "how to" section accompanies these recommendations. For example, this section provides guidance for interested groups on how to collect data on pedestrian activities, how to evaluate the pedestrian context, and how to organize and conduct a "Safe Route to School Program."

Roosevelt Row urban design objectives were developed using the [MAG Pedestrian Policies and Design Guidelines \(2005\)](#) as a foundation. However, the character of the street, it's role as a key component of the downtown arts district and a gateway to downtown, as well as, it's functional role as a main downtown access/egress point require that urban designs be developed that are specific to the site and facilitate development of a unique, urban environment.

City of Phoenix Street Transportation Department 2005 Phoenix Bicycle Collision Summary Report:

The latest version of City of Phoenix Street Transportation Department [2005 Phoenix Bicycle Collision Summary Report](#) (available at the time of preparation of this report) provides statistics from 2004. This report summarized data collected in Phoenix in that year. The 2005 report contains information that has been of value to the development of concept plans and details for the proposed pedestrian enhancements along Roosevelt Row. For example, City of Phoenix statistics on bicycle collisions indicate that 47% of bicycle collisions occurred more than 150' from an intersection, while 53% of bicycle collisions occurred at a street intersection. Only 9.2% of collisions occurred mid-block when bicyclists crossed against traffic. In total, 20% of bicycle collisions occurred on sidewalks and an additional 5% of collisions occurred in designated bicycle lanes. A total of 30.9% of bicycle collisions occurred in or near marked crosswalks. Surprisingly, 34.7% of collisions occurred near traffic signal controlled intersections, 80% of bicycle collisions occurred during daytime hours, and bicyclists were deemed to be at fault in 53% of the collisions reported. With reference to this report, the obvious conclusion is that bicycle safety is an important issue that impacts the enhancement designs proposed herein.

[City of Phoenix Street Transportation Department 2005 Pedestrian Collision Summary Report:](#)

The [City of Phoenix Street Transportation Department 2005 Pedestrian Collision Summary Report](#) summarized data collected in the City of Phoenix for year 2004 and provided conclusions that are of great relevance to this pedestrian enhancement study. For example, during 2004, there were 660 pedestrian related crashes involving 707 pedestrians of which 131 pedestrian/vehicular crashes were hit-and-run. The pedestrian was listed as primarily at fault in 59% of collisions reported. Approximately 22% of all crashes occurred at traffic signals. In total there were 41 pedestrians killed. On a per capita basis, more pedestrian collisions occurred in downtown Phoenix than any other location in the City (8 or more pedestrians per 10,000 population).

[City of Phoenix Street Transportation Department 2005 Traffic Collision Summary Report:](#)

The [City of Phoenix Street Transportation Department 2005 Traffic Collision Summary Report](#), provides statistical summaries for traffic collisions for year 2004. This report summarizes statistics for pedestrian, bicycle and motorized vehicle collisions. The report indicates that during 2004 the number of people involved in traffic collisions was 10 times higher than the number of people who became victims of violent crimes. During year 2004, 32,036 traffic collisions occurred in Phoenix. Just over 40% of all traffic collisions resulted in injury or fatality. Over 26% of collisions occurred between 3:00 pm and 6:00 pm. Almost 66% of all traffic collisions occurred within 150 feet of an intersection.

Planning and Design Documents

[Dyett & Bhatia Downtown Phoenix Urban Form Project:](#)

The [City of Phoenix Urban Form Project](#) is currently under way. This project commenced in spring of 2006 and is scheduled for completion by December 2007. The purpose of this project is to develop zoning and master plans on a block-to-block basis, for downtown Phoenix, as a method to "create a bridge between vision and zoning" (from the Kick-off presentation by Dyett and Bhatia consultants, June 2006). The primary goals of this project are: to emphasize physical form and structure, as well as, develop simple format regulations that achieve the zoning and master planning objectives. These goals were derived as a method of creating a downtown Phoenix that serves as the heart of the City by inspiring civic pride.

The [City of Phoenix Urban Form Project](#) commenced at approximately the same time as the [MAG/Roosevelt Row Pedestrian Enhancements](#) project. The [Urban Form Project](#) is currently in the first of three planned project stages, gathering data from public and stakeholder meetings. Preliminary recommendations are to be made at the end of 2006 for each City of Phoenix core area district being studied. These recommendations will propose methods for incorporating sustainable development principles, streetscape development recommendations and recommendations for downtown Phoenix parks and open space master planning. Although these recommendations will benefit the next phase of the Roosevelt Row project, the preliminary recommendations occur at the end of this project phase and so have not been incorporated in this study.

Downtown Phoenix Strategic Vision and Blueprint for the Future (2004)

The December 2004 presentation Downtown Phoenix Strategic Vision and Blueprint for the Future outlined the development of a strategic vision for downtown Phoenix, defined as an area between 7th Avenue and 7th Street (the west and east boundaries respectively) and Lincoln Street and Hance Park (the south and north boundaries). The three principles of this strategic vision were community, integration and connectivity. The Strategic Vision addresses the importance of the Roosevelt Historic District to downtown Phoenix. This District touches on the west side of Roosevelt Row, specifically the south side of Roosevelt Street between 2nd Avenue and 1st Avenue. The Vision also calls Roosevelt Street one of the primary pedestrian pathways in the downtown. The Strategic vision also recommends that the City “explore ways to protect and enhance the existing arts presence along or in close proximity to Roosevelt Street”. The Vision calls for a “grand civic space to carry through to Roosevelt Street” and recommends designing for strong pedestrian connections to the Roosevelt District with emphasis on 1st Avenue and Second Avenue. The document also recommends improving pedestrian amenities along Roosevelt Street.

Two additional documents were reviewed as background to this report. They included the City of Phoenix Planning Department and EDAW Inc 1991, A Policy Plan for the Phoenix Arts District, and the City of Phoenix Planning Department 1989, The Roosevelt Neighborhood Special District Plan. Because both of these documents were prepared over 15 years ago they have since been updated or replaced with more current documents, of which the most current and relevant ones are discussed above.

Public Input Process

The public input process for the Roosevelt Row project commenced with a Stakeholder Sitewalk in May, 2006 and was followed by an informal progress review meeting with City staff and HDR on October 5th to review progress and discuss the plan and design development approach. Stakeholder meetings were held on November 21st and December 19th, which concluded the public input process.

Site Walk in May

A Stakeholder Site walk was hosted by staff and HDR on May 4th 2006 involving 19 members of the public, HDR Engineering and City staff. This event involved a walk through the Roosevelt Row Study Area from 2nd Avenue to 7th Street. The purpose of the Site walk was to introduce the Roosevelt Row project and the Study Area to the public and gather comments and suggestions from the Site Walk participants. Some of the comments collected include:

- We don't need a lot, less is more.
- Provide opportunities for businesses to do something.
- 2nd Avenue enhancements are too controlled.
- Pedestrian lighting might be nice - the light fixtures can create a theme with banners hung from them.
- We need a more 'urban' look.
- Bicycle racks are important.
- On the north side of the street, shade could be created by the buildings.
- A faster project would benefit the businesses along the street.
- Metered parking has good and bad aspects to it.
-

- The plan could be implemented in stages.
- No improvements like Dunlap and 7th Street – with trees just stuck in grates.
- Sidewalk treatment may be the answer to the “feel” of the street. Also, where vehicles cross Roosevelt, they would know it’s a different type of environment.
- On street parking, similar to that at Kierland Commons, would be good.
- The City considers Roosevelt Street a key vehicular route into and out of the downtown.
- Need for identity signage for Roosevelt Row.

November Staff Stakeholder Meeting

A Stakeholder Meeting was held on November 21st for the consultant, HDR to review conceptual designs and receive feedback and direction from the City on the progress of this project. The meeting was attended by 9 individuals and consisted of a formal presentation of Master Plan and Design concepts by HDR Engineering. A discussion between HDR and City of Phoenix staff regarding issues needing to be resolved prior to the completion of the Master Plan preparation and design phase of the project followed. Comments received during this meeting included:

- Consider re-labeling ‘Phase 1’ and ‘Phase 2’ as ‘Concept 1’ and ‘Concept 2’. For Concept 2, create a more elaborate vision of streetscape with narrowed streetscape and more tree-lined streets.
 - Entrance sign currently proposed to be located east of 2nd Avenue in center turning lane should be 100’ from nearest north/south crosswalk on 2nd Avenue.
 - Check with Barbara Stocklin (historic preservation) regarding location of historic stamp on southeast corner of Roosevelt
-
- Street and 2nd Avenue and relocate sun graphic proposed for that area according to her advice.
 - Add more bulb-outs where possible.
 - Add more trees where possible.
 - Specifically, add more trees to the south side of Roosevelt Street between 2nd Avenue and the alley immediately east of 2nd Avenue.
 - Redesign vertical structure in mid-block crossing (Phase 2 between 4th Street and 5th Street) to be more durable due to potential for being hit by cars.
 - Add proposed lighting to some locations in design.
 - Move Art Walls back a minimum of 3’ - 5’ from the curb in all locations.
 - Make more ‘Port-A-Scape’ trees permanent (planted) as opposed to being planted in containers.
 - Propose methods for making some of the ‘Port-A-Scape’ concept locations permanent streetscape installations.
 - Center median signage is not a true crossing without ADA compliance ramps and safety features. Consider modifying concept to include these features.
 - For next meeting, create several boards of component samples and material samples proposed for use in the design.
 - Do a one-page Executive Summary for revised drawing distributions.
 - Place revised designs on HDR Server so clients can access and review/comment.
 - Set up next Stakeholder Meeting for week before Christmas (Monday/Tuesday).
 - Check with City Transit regarding 3rd Street southwest triangle to see if this land can be consolidated by closing the roadway between the two sections (4th Street).
 - Meet with parks regarding potential design concept maintenance issues.

December Stakeholder Meeting

A final Stakeholder Meeting was held on December 19th 2006 at the Phoenix Center for the Arts. A total of 19 individuals were in attendance. A presentation of finalized Master Plans and design details was made by HDR to City staff, stakeholders, and members of the public who were present at this event. Comments received included the following:

- Change "Port-a-Scape" name (sounds like "Port-a-Potty")
- Do these temporary "Port-a-Scape" spaces tend to become permanent fixtures in the public's mind? Will their removal when the property is developed become an issue?
- Do the "Port-a-Scape" parks contain presentation/performance areas?
- It is important to "activate" these lands with "Port-a-Scape" development rather than leave vacant until future development occurs.
- Signage should be placed as part of "Port-a-Scape" development to state that they are temporary installations.
- The Roosevelt Area never had a "wash" through it, so perhaps the "Wash of Art" should be replaced by a more urban name such as "Canal of Art".
- Canals were built in this area, so that may be a more appropriate name.
- Have pedestrian tunnels under Roosevelt Street or pedestrian bridges over Roosevelt Street been considered?
- Need to stop being afraid of cars and traffic – we need to embrace it. If we have enough sidewalk width people can take over the street.
- Roosevelt Row has always been progressive, so the theme should be about progress. The design needs more lighting.
- The Street along Roosevelt Row is intended for the pedestrian but the markers/signage need to be for the car in order to identify where people should stop.
- Banner/event poles need to be sturdy.
- The 3rd Street triangle needs to be emphasized.
- Could the existing utility poles be used for art?

PROJECT DEVELOPMENT CONSIDERATIONS

During the early stages of the site planning and design process the Roosevelt Row site context was inventoried. The site inventory results were compiled in a report titled [Site Inventory Checklist and Summary Report](#) , which was submitted in September 2006 to the City of Phoenix, for review and input. Site features were photographically documented and the inventoried information was recorded and analyzed. This exercise was undertaken for purposes of determining opportunities and constraints related to designing and implementing site enhancements. A major goal was to identify specific site development considerations, which may impact positively or negatively on future enhancement efforts. Following is a discussion of findings:

Right-of-way Requirements

For purposes of preparing plans and design drawings, the road rights-of-way within the Study Area were taken from City of Phoenix maps, which provided accurate, digitally-prepared base information. This information has been graphically included on the master plans (see Appendix A). This information indicates that the location of rights of way vary depending on existing street characteristics and property lines. In several cases such as between 3rd Street and 5th Street, the road rights-of-way between curb edge and property line are extremely tight, making it difficult to develop pedestrian sidewalks of an acceptable 8' to 12' width. In these cases, negotiations will need to be entered into between property owners and the City of Phoenix to extend road rights of way sufficiently to enable construction of walkways of sufficient width.

Utilities

The [Roosevelt Street Utility Summary Report](#) was compiled and provided to the City in late September 2006. Some utility features along Roosevelt Street are of concern. They present potential obstacles to streetscape redevelopment. Overhead utility lines occur mainly on the south side of Roosevelt Row leaving the north side of Roosevelt Street clear. Large 69 KV poles and power lines are situated in several locations along the south side of the street. Unlike the smaller local above ground utilities these 69 KV poles and power lines are strategically important to the region in that they are part of a system that provides services to the greater Phoenix area. Aside from these considerations, numerous underground utility conduits are currently situated within the study area, which would potentially be disrupted by placing additional utility lines underground. Future redevelopment in the Study Area should address undergrounding of utilities.

Traffic

The [Roosevelt Row Transportation Summary Report](#) was also provided to the City in late September 2006. Traffic issues and considerations related to project development are also discussed above in section 1e, under the review of the City of Phoenix [2005 Bicycle Collision Summary Report](#), the [2005 Pedestrian Collision Summary report](#), and the [2005 Traffic Collision Summary Report](#). In addition, the streetscape consists of a two-way, two lane roadway separated by a center turning lane.

Sidewalks exist along north and south sides of the roadway throughout the project site. These walks are typically 4' wide. However, they can vary in widths and states of repair in places. Most sidewalks are in fair to good condition with the exception of several sections of sidewalk between 2nd Street and 7th Street. Some wider sections of sidewalk have been built in conjunction with redevelopment efforts such as Artisan Village (located on the north side of Roosevelt Street between 5th Street and 7th Street). These expanded pedestrian areas provide pleasant places for pedestrians to walk and socialize. Above ground utility lines are located primarily on the south side of Roosevelt Street. There is limited on-street parking in selected locations, most notably between 5th Street and 7th Street. The proposed enhancements along Roosevelt Street address these issues by widening and improving conditions of walkways where possible, as well as, by introducing safety features such as enhanced crosswalks and protective traffic barriers.

Drainage

Drainage within the Study Area is not generally an issue. However, as with other locations in the City, monsoon rains can cause sudden flooding of the streetscape and become a hazard to traffic and pedestrians. In these specific cases, the drainage system of the street is unable to handle the sudden downpours. Future design of streetscapes and pedestrian zones should take these seasonal variations into consideration. Consideration should also be given to designing and implementing water harvesting systems that are able to catch and store excess surface run off, which can be used for irrigation and street maintenance purposes.

Environmental Considerations

Wetland and Riparian Areas

There are no wetlands or riparian areas in the project vicinity; therefore, there will be no direct impact to wetlands as a result of this project.

100-year Floodplain

A review of the Federal Emergency Management Agency Flood Insurance Rate Map for the project area indicates that no portion of this project is located within a 100-year floodplain. The project is located in Zone X, this being areas of 500-year flood, areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile and areas protected by levees from 100-year flood.

Clean Water Act Sections 404 and 401

The proposed construction activities do not appear to involve the discharge of dredged or fill material into waters of the US. Requirements for a Clean Water Act Section 404 permit or Section 401 certification should be determined during the Environmental Determination process.

Section 4(f)

There are no publicly owned recreation areas or wildlife and waterfowl refuges. Margaret T Hansen Park is located just to the north of Roosevelt Row along I-10. This park includes the new "deck park". There are two historic properties within the APE (area of potential effect). These include a portion of the Roosevelt Historic District, which is on the National Registry of Historic Places (NRHP),

and the Roosevelt Community Church at 924 North 1st Street, which is listed on the Phoenix Historic Property Registry and is eligible for listing on the NRHP. Therefore, Section 4(f) involvement with the construction of this project is anticipated.

Sole Source Aquifer

This project is not within the limits of a designated sole source aquifer area; therefore, this project will not require a Safe Drinking Water Act Section 1424(e) review.

Noise

The nature of this project is not likely to increase current noise levels or present a negative impact. Construction noise will be controlled in accordance with the Arizona Department of Transportation *Standard Specifications for Road and Bridge Construction*, Section 104.08 (2000 Ed.), special provisions, and City of Phoenix rules or ordinances.

Air Quality

This project is located in the Maricopa County Non-Attainment Area for Particulate Matter (PM₁₀). As a bicycle and pedestrian facility, this project is exempt from conformity regulations. This project will not have a negative impact on the air quality in the area.

Some deterioration of air quality may be expected due to the operation of equipment during construction; however, this should be localized and will cease when the project is complete.

Hazardous Materials

No determination as to whether a hazardous materials site assessment is needed had been made at the time of this report. It will be decided as part of the Environmental Determination whether this is required.

Arizona Pollutant Discharge Elimination System

Because this project will result in 1 or more acres of ground disturbance, an Arizona Pollutant Discharge Elimination System general permit may be required. A stormwater pollution prevention plan may also be needed.

Scenic/Historic Route

The project is not located on a route that is designated scenic or historic.

Cultural

A cultural sites search was out of the scope of this report.

Title VI

No federal financial assistance is currently being used for the undertaking of the MAG Design Assistance Program Roosevelt Row Enhancements Project. No Federal funding is currently being sought in this phase of the project development. Compliance with Title VI regulations will take place at a future date when federal funding may be sought to finance portions of this project's implementation.

DESIGN ALTERNATIVES

The [Roosevelt Row Design Objectives Memo](#) was prepared and submitted to the City of Phoenix in August 2006. This memo contained urban design objectives specific to Roosevelt Row, which were developed using the [MAG Pedestrian Policies and Design Guidelines](#) (2005) as a foundation. The unique character of the street, it's role as a key component of the downtown arts district and gateway to downtown and the functional role of the roadway as a main downtown access/egress point require that urban designs be developed that are specific to the unique context of Roosevelt Row and facilitate development of a unique urban environment. Design objectives also respond to public input obtained during the Site walk, the Stakeholder meetings, the findings of the [Site Inventory Checklist and Summary Report](#), and to other summaries provided in this report.

Broad Objectives

The design objectives for Roosevelt Row are grouped into two types: broad objectives (goals to be achieved by the design) and specific objectives (actions that achieve the goal). Full details of the design objectives are contained in the [Roosevelt Row Design Objectives Report](#) (8/20/06). Broad design objectives include:

- Based on the MAG Pedestrian Policies and Design Guidelines, prepare a master plan and urban designs for Roosevelt Row that emphasize it's role as a gateway to downtown, a connection between other key downtown destinations and contribute to establishing a unique and dynamic urban pedestrian environment.
- Create a safe, pedestrian environment on Roosevelt Row as a primary defining component of an arts district along Roosevelt Street between 7th Street and 2nd Avenue.
- Provide pedestrian amenities and urban design concepts that support a vibrant and distinctive arts district.

Pedestrian Safety

Pedestrians are the primary participants and contributors to a successful Roosevelt Row development. Establishing a connected and dynamic, safe and enjoyable pedestrian environment along Roosevelt Street will ensure long-term pedestrian interest and participation. The safety and comfort of the pedestrian visitor to the site is a critical factor to project success. This is why designs for Roosevelt Row will first and foremost address the needs of the pedestrian.

The pedestrian area within Roosevelt Row will be designed to achieve MAG standards related to pedestrian safety, specifically: those that address separation of pedestrian and vehicular traffic; issues of pedestrian lighting; safety issues related to pedestrian walkway surfaces; and issues related to safe crossing at intersections and mid-block. MAG policies and guideline recommendations for design form the basis for achieving this objective.

Beyond addressing design standards and guidelines the designs for Roosevelt Row are intended to exceed MAG standards by creating a pedestrian friendly environment throughout the project site. For example, this will be achieved by developing an open space system throughout the site, including proposed development of sections of the existing center turning lanes as landscaped center islands. This approach will expand the pedestrian area along Roosevelt Street, establish mid-block pedestrian links, and at the same time, contribute to the integration of pedestrian and vehicular traffic. Landscaped center islands will calm traffic and also provide a "safe zone" for pedestrians crossing the street, contributing to the comfort of the Roosevelt Row visitor.

Alternative Concepts

Based on design objectives proposed in the [Design Objectives Memo](#) two alternative design schemes were prepared for the Study Area site. These concept alternatives were labeled Concept

A and Concept B. Copies of both concepts are located in Appendix A.

Concept A

This concept takes a low key design approach and considers basic improvements, which can be made in the near future to the project site. For Concept A, consideration was given to existing issues and constraints such as rights of way and above ground utilities.

Concept B

This concept illustrates a more visionary design approach to pedestrian enhancements. This concept explores the “what if” scenario for the site, for example, by proposing collaborative streetscape elements that combine art and function and create a unique urban identity.

PROPOSED PLAN AND DESIGN CONCEPTS

The preliminary design approach and concept development were discussed at the informal meeting held on October 5th. Several revisions to the design approach were suggested at that meeting, including the following:

A discussion regarding the expectations of the clients, related to the final project deliverables, including delivery of alternative master plan proposals, associated design concepts, and final public consultation processes.

Gail Brinkmann directed the consultants to produce two alternative master plans, associated concepts and illustrations, with the intention of realistically satisfying client expectations, while effectively communicating a strong vision of what is possible along Roosevelt Row.

The first alternative will address enhancements for the existing site without involving significant expansion of pedestrian areas and with minimal disruption to vehicular circulation and parking. This plan will represent phase one of pedestrian enhancements along Roosevelt Row.

The second alternative will be visionary in character. This plan will illustrate the potential for the site to become a model for the implementation of the MAG Pedestrian Policies and Design Guidelines on similar sites within communities under MAG jurisdiction.

Concepts Development

Concept A and Concept B were developed based on initial research, site inventory, and input from public participants and the client. These concepts were based on several themes, which were proposed as a method of establishing Roosevelt Row as a unique, vibrant, pedestrian friendly urban district, which serves as a gateway to Downtown Phoenix and the heart of the Phoenix Downtown Arts District. Four broad 'themes' were proposed as follows.

Figure #3: Port-A-Park Concept



Port-A-Park System

The design approach proposed a system of portable parks (see Figure #3 and #4). As mentioned above, the Study Area currently has a significant amount of vacant land. Specifically, it was proposed

that the City negotiate with property owners who own vacant land, to partner in the temporary development of these lands as parks and related open space. The City would contribute a “kit” of park building materials and several alternative designs. The designs would provide guidance for the development of small, medium, and large parcels of vacant land. The “kit” of building materials would include reusable components such as unit pavers, planting boxes, benches, and pedestrian lighting. These components would be placed on the vacant land along with trees and shrubs for a period of 3 to 5 years until the land was redeveloped by the owner. When redevelopment occurred, the park building components would be removed and used to build a new portable park. As an incentive to participate, some shrubs and trees could be left for the owner to utilize in the redevelopment process. The initial suggestion was to call these parks “Port-A-Parks”. A second option would be to call this unique open space system “Pocket Parks”, which is a common name for small urban open spaces or “green spaces”. A third option would be to label them “Portable Parks”.

Figure #4: Port-A-Park Concept with Performance Stage



Wash of Art Concept

The design approach also proposed a “wash of art” concept (see Figure #5). The “wash of art” concept is intended to unify the Roosevelt Row site. The concept borrows from the ecological function of river washes. River washes bring water to the desert and give life to desert plants and animals. Similarly, Roosevelt Row is intended to revitalize the area as the heart of the Arts District in Phoenix. It is hoped that reinforcing the presence of an Arts community in Downtown Phoenix along Roosevelt Street will bring new life to the urban center. The concept is based on several objectives. One of these objectives was to involve local artists in the design and implementation of Roosevelt Row pedestrian enhancements. Another objective was to enhance the Roosevelt Row site in a uniquely identifiable manner. The ‘wash’ concept addressed both of these objectives. Local artists would be involved in design and implementation of the ‘wash’, which would run intermittently throughout the length of Roosevelt Row on both sides of the street.

Figure #5: Wash of Art Concept



Figure #6: Art Walls with Benches and Local Artist Display Area



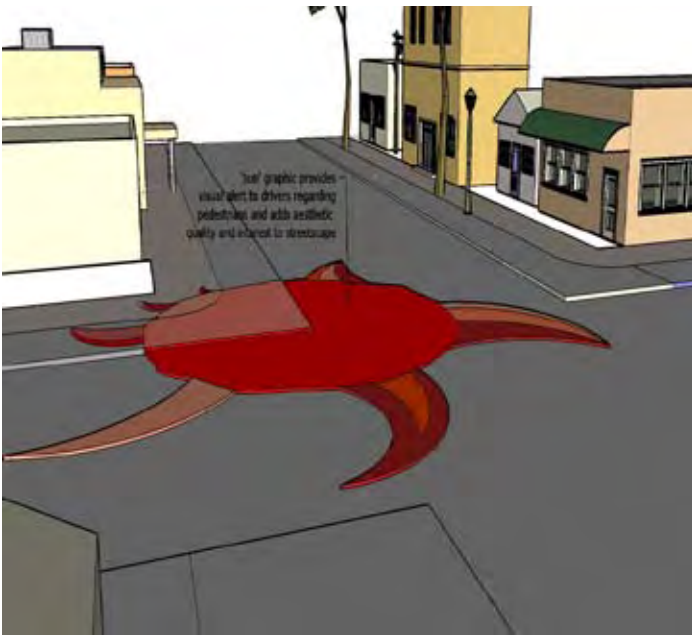
Art Walls Concept

The "Art Wall" (see Figure #6) concept involves the design and implementation of small walls, which have several functions. Art walls are low walls (maximum 40" height) and are located on the curbside of the sidewalk or in Port-A-Park development locations. In some situations these walls aid in providing a low protective barrier between the pedestrian and traffic. In other cases they are fitted with a bench. In other cases, they provide an opportunity for local artists to demonstrate their talents and exhibit their work.

Street Graphics Concept

The "Street Graphics" concept (Figure #7 below) involves local artists in designing and implementing colorful and attractive street graphics. These street graphics perform a number of functions. First, they provide local artists with an opportunity to showcase their talents and participate in the creation of a distinct Roosevelt Row context. They also 'brand' the site as a uniquely identifiable district in Downtown Phoenix. They alert the driver to pedestrian traffic and cause vehicles to slow down. Finally, they alert the pedestrian that this is a pedestrian-friendly environment.

Figure #7: Street Graphics / Sun Motif



Concept A and B, as well as, related designs were presented at the November 21st Stakeholder's meeting. Revisions were requested to both concepts at that meeting.

Full details are provided above. Highlights of these requested revisions included:

- Adding more trees to both Concepts and especially to Concept B.
- Adding more "bulb-outs" to Concept B.
- Add more shade structures, where possible.
- Add lighting in key areas of the designs.

Concept A and Concept B were revised for presentation at the December 19th Stakeholders Meeting. A summary of comments is provided above. Highlights of suggested changes to plans and designs included:

- Consider changing the theme of the "Wash of Art" to a more urban theme. One suggestion was to use the canal system, which is associated with the development of the City of Phoenix as a "Canal of Art" theme.
- Change the name "Port-A-Scape" to something more unique, such as "Portable Park".
- Consider designing innovative pedestrian crossing alternatives along Roosevelt Row, such as underground tunnels and/or pedestrian bridges.
- Include more trees and lighting in the final design concept.
- Consider designing entrances to alleyways with lighting for increased safety and usability.

DuraTherm Crosswalks

The Roosevelt Row pedestrian enhancement design proposal recommends the use of DuraTherm™ crosswalk systems, which are designed for high traffic installations (see Figure #8 and #9). The DuraTherm™ crosswalk system has been used under various traffic and climate conditions in many municipalities throughout the United States and in Canada, including Philadelphia, Nashville, and Los Angeles. The DuraTherm™ crosswalk installation consists of an asphalt base inlaid with patterns and colors in thermoplastic. DuraTherm™ crosswalk systems are proposed for the Roosevelt Row project because they have been successfully used in other similar high traffic situations in similar urban contexts and offer a range of graphic designs that compliment the proposed design themes presented herein.

Figure #8: DuraTherm™ with Custom Color Graphics



Source: IPC Integrated Paving Concepts website
(<http://www.streetprint.com/duratherm/>)

Figure #9: DuraTherm™ with Complex Patterns in White Inlay



Source: IPC Integrated Paving Concepts website
(<http://www.streetprint.com/duratherm/>)

GENERALIZED ESTIMATED COSTS

A generalized cost estimate is provided below. This estimate is provided as a guide for future decision-making. It is based on the findings of this study and the design concepts developed as part of the Roosevelt Row Enhancement Project process. However, for several reasons, the Generalized Cost Estimate is not intended to represent a detailed, itemized cost estimate for construction of the Roosevelt Row project. A more thorough investigation of site conditions affecting construction will be an essential element of this process. Without such an investigation, it is not possible to prepare an accurate, detailed cost estimate. In addition, preparation of a detailed cost estimate will only be possible in the next stage of the project after detailed designs and construction drawings are prepared and accepted for construction by the client.

Design:

Plans, Specs, and estimate (10% - 20% of construction)	\$517,180.00
Site topographic survey (2% - 5% of construction costs)	\$172,394.00

Site Preparation Items:

Scoping document	\$150,000.00
Environmental determination	\$37,500.00
Hazardous materials assessment	\$3,500.00
Geotechnical investigation	\$15,000.00
Storm water pollution preservation plan	\$15,500.00
Rights-of-way acquisition	\$500,000.00
Site preparation	\$133,717.00
Remove asphalt	\$30,000.00
Remove curbs and gutters	\$20,000.00
Remove concrete sidewalks	\$60,000.00
Miscellaneous demolition	\$25,000.00
Utilities relocation (including conduits and new street lights)	\$687,500.00

Construction Activities:

Contractor mobilization (8% of construction costs)	\$275,830.00
Traffic control (0-8% of construction costs)	\$275,830.00
Construction survey and layout (1% of construction cost)	\$34,479.00
Construction administration (18% of construction costs)	\$620,617.00
Construction contingencies (5% of construction costs)	\$172,393.00
Stormwater pollution prevention (5% of construction costs)	\$172,393.00

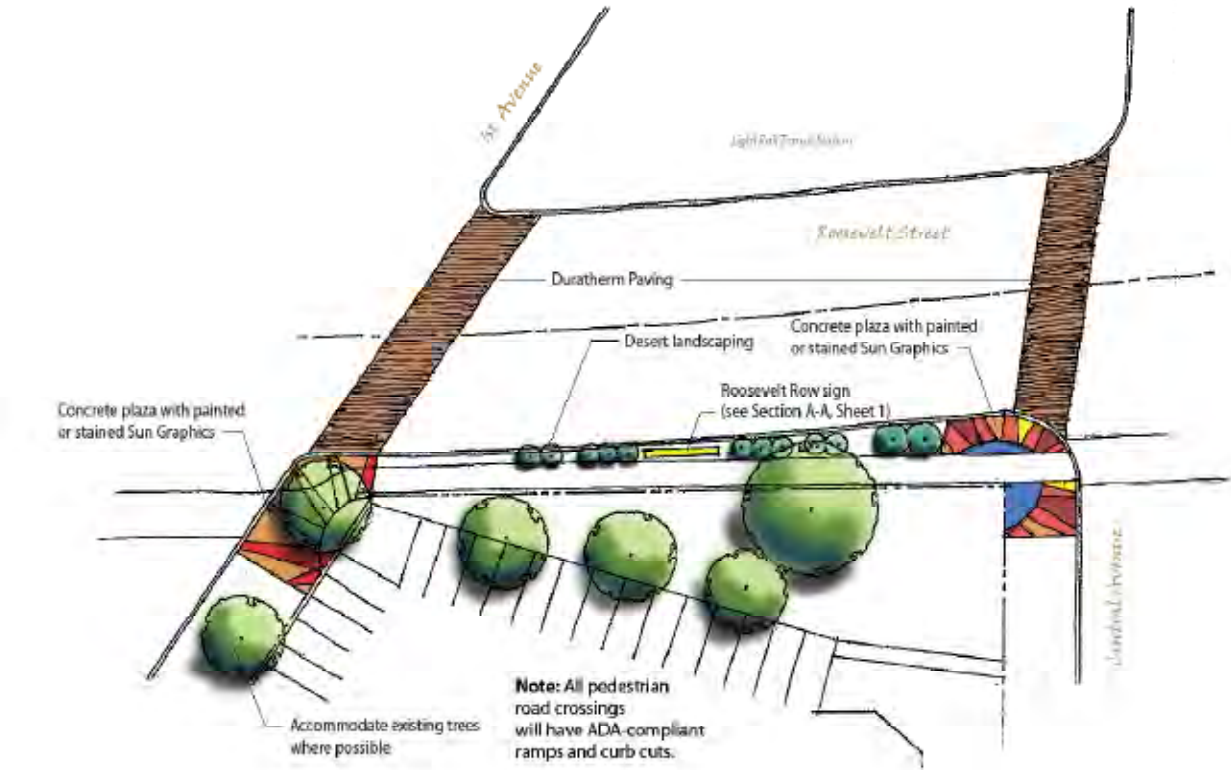
Construction Items:

Curb and gutter	\$82,800.00
Aggregate base	\$26,400.00
Asphalt	\$75,530.00
Pavement markings	\$4,000.00
Replace chain link fencing with decorative fencing	\$38,600.00
Outlets for power for events	\$50,000.00
Outdoor pedestrian lighting fixtures	\$150,000.00
Vehicular signage	\$7,5000.00

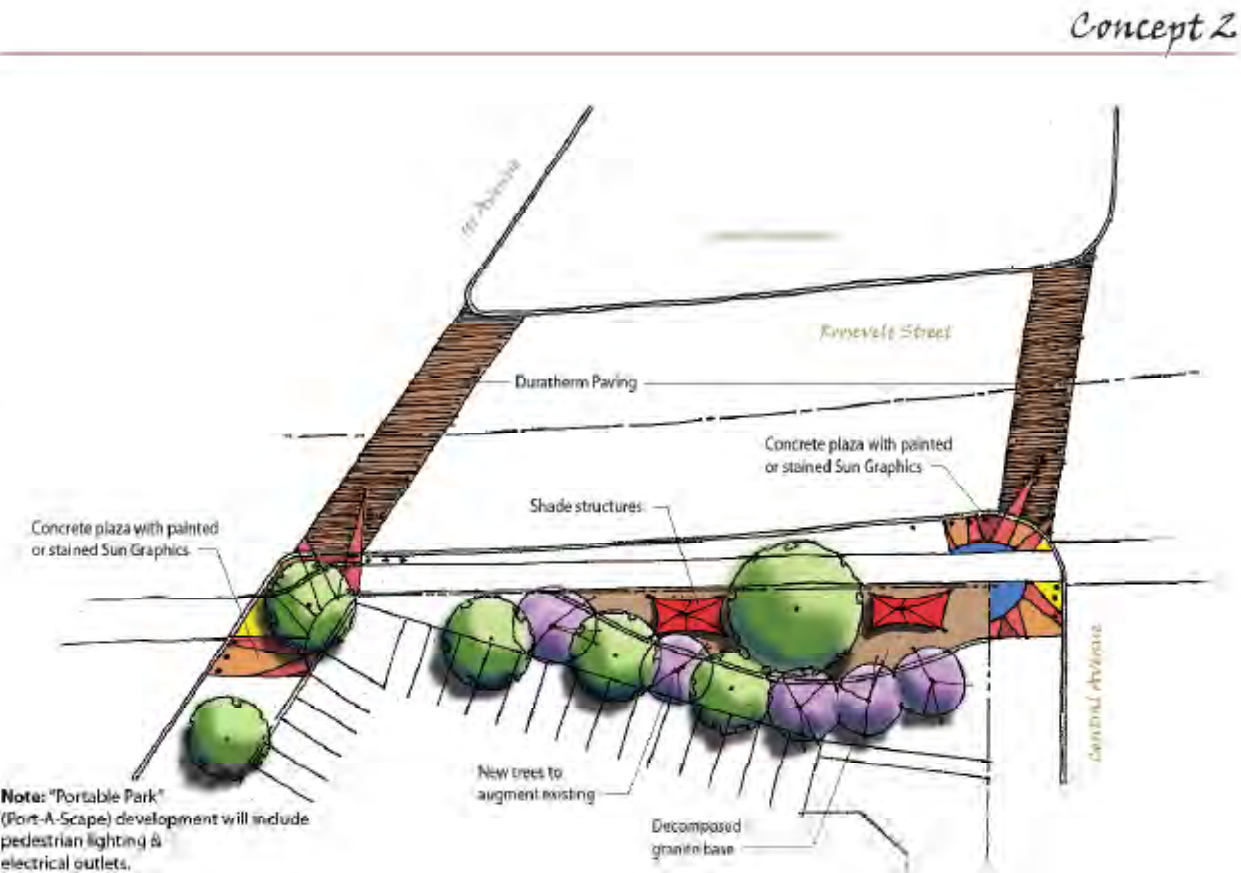
Construction Items (Continued):

Roosevelt Row site signage	\$35,000.00
Information kiosks	\$49,000.00
Colored concrete graphics on sidewalk	\$140,500.00
DuraTherm cross walks	\$250,000.00
Pedestrian ADA ramp upgrades	\$108,000.00
Pedestrian lighting	\$120,000.00
Landscape irrigation	\$25,000.00
Trees (large caliper)	\$90,000.00
Trees (medium caliper)	\$17,500.00
Shrubs (large)	\$8,000.00
Shrubs (medium)	\$6,500.00
Decomposed granite	\$27,500.00
Topsoil	\$12,875.00
Re-grade and Berm	\$4,600.00
Turf sod	\$2,750.00
Boulders	\$22,500.00
Drip Irrigation	\$40,000.00

Landscape Establishment	\$14,900.00
Benches.....	\$16,400.00
Seatwalls	\$37,500.00
Bike Racks	\$7,300.00
Trash Receptacles.....	\$7,500.00
Drinking Fountains	\$18,000.00
Tree Grates	\$60,000.00
Shade Structures	\$180,000.00
Alley Entrance Enhancements	\$14,600.00
Driveway Entrance Enhancements	\$19,400.00
 Total Design Costs	 \$689,573.00
 Total Site Preparation Costs	 \$1,677,717.00
 Total Construction Costs.....	 \$3,447,872.00
 Total Project Implementation Generalized Cost Estimate	 \$5,815,162.00



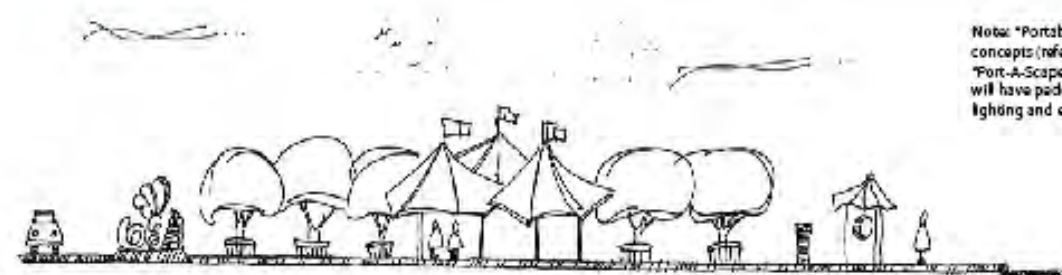
Concept I



Concept 2



Concept 1

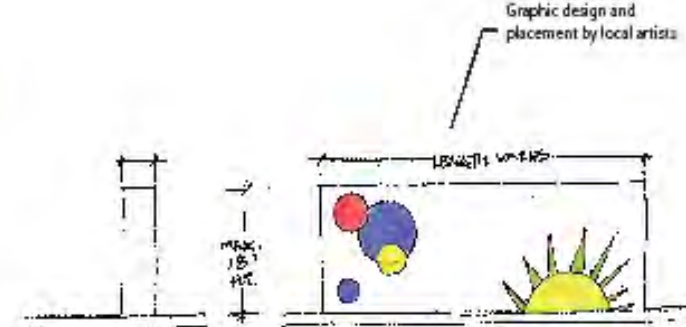


Section B-B
"Portable Park" Plaza

Note: "Portable Park" concepts (referred to as "Port-A-Scape" or "Pocket Park") will have pedestrian-scale lighting and electric outlets

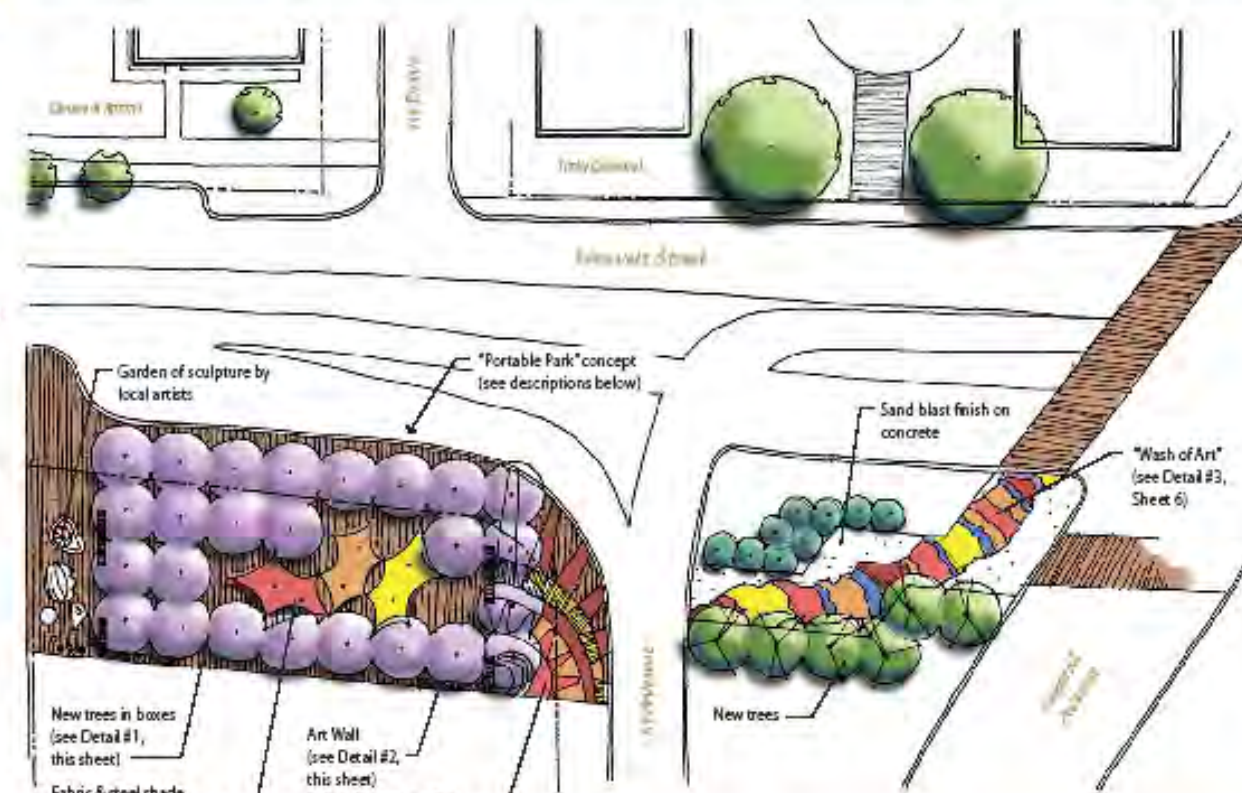


Detail #1:
New trees in
box planters



Detail #2:
Art Wall Concept

Concept 2



New trees in boxes
(see Detail #1,
this sheet)

Art Wall
(see Detail #2,
this sheet)
Painted or stained Sun
Graphic on concrete

"Wash of Art"
(see Detail #3,
Sheet 6)



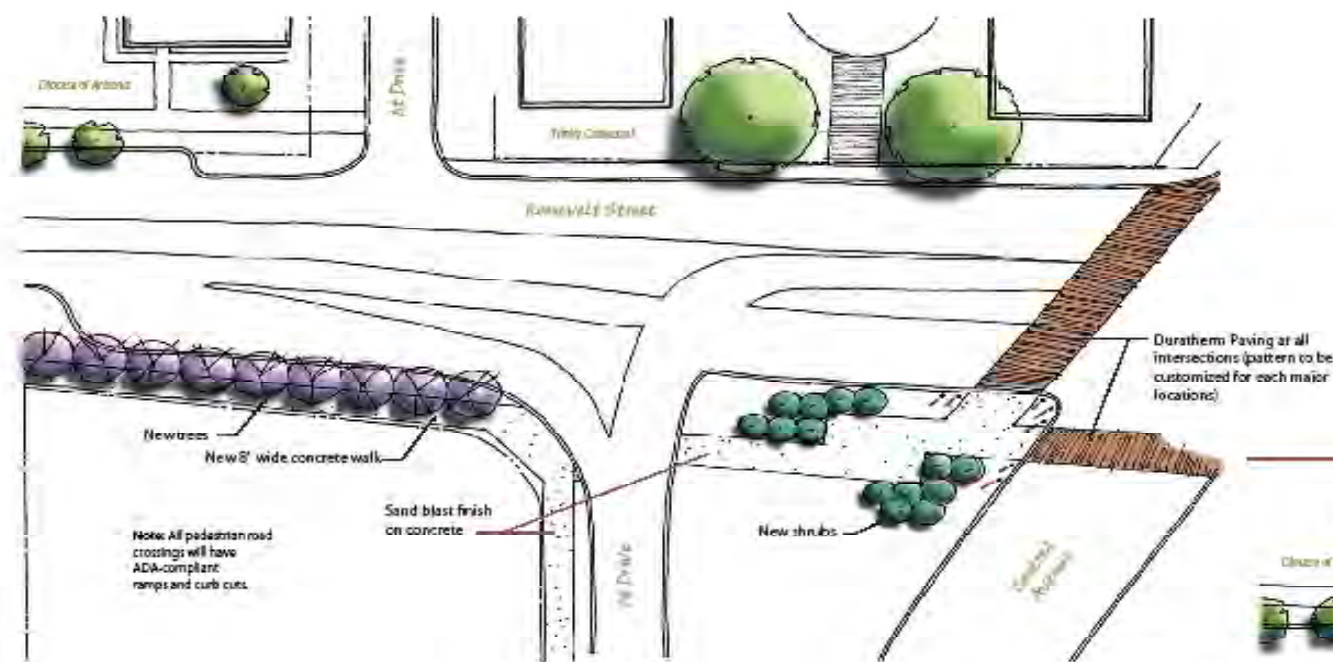
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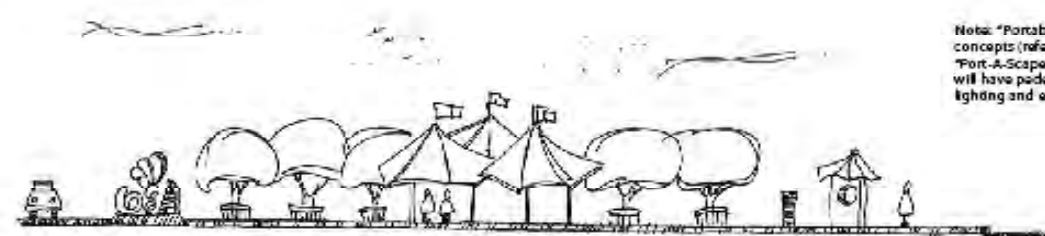
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Sheet 2 - 1st Drive to Central Avenue

Roosevelt Row



Concept I

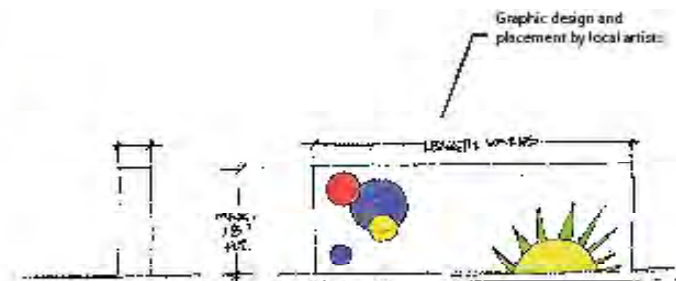


Section B-B
"Portable Park" Plaza

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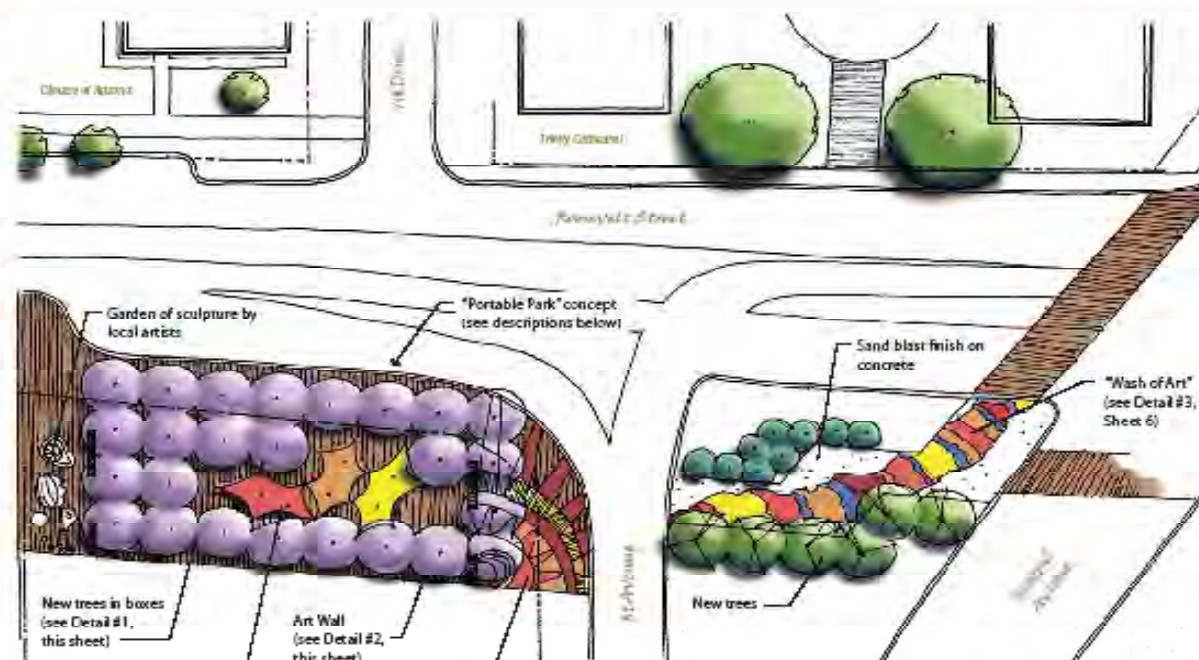


Detail #1:
New trees in
box planters



Detail #2:
Art Wall Concept

Concept 2



New trees in boxes
(see Detail #1,
this sheet)

Art Wall
(see Detail #2,
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Painted or stained Sun
Graphic on concrete

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(see Detail #3,
Sheet 6)



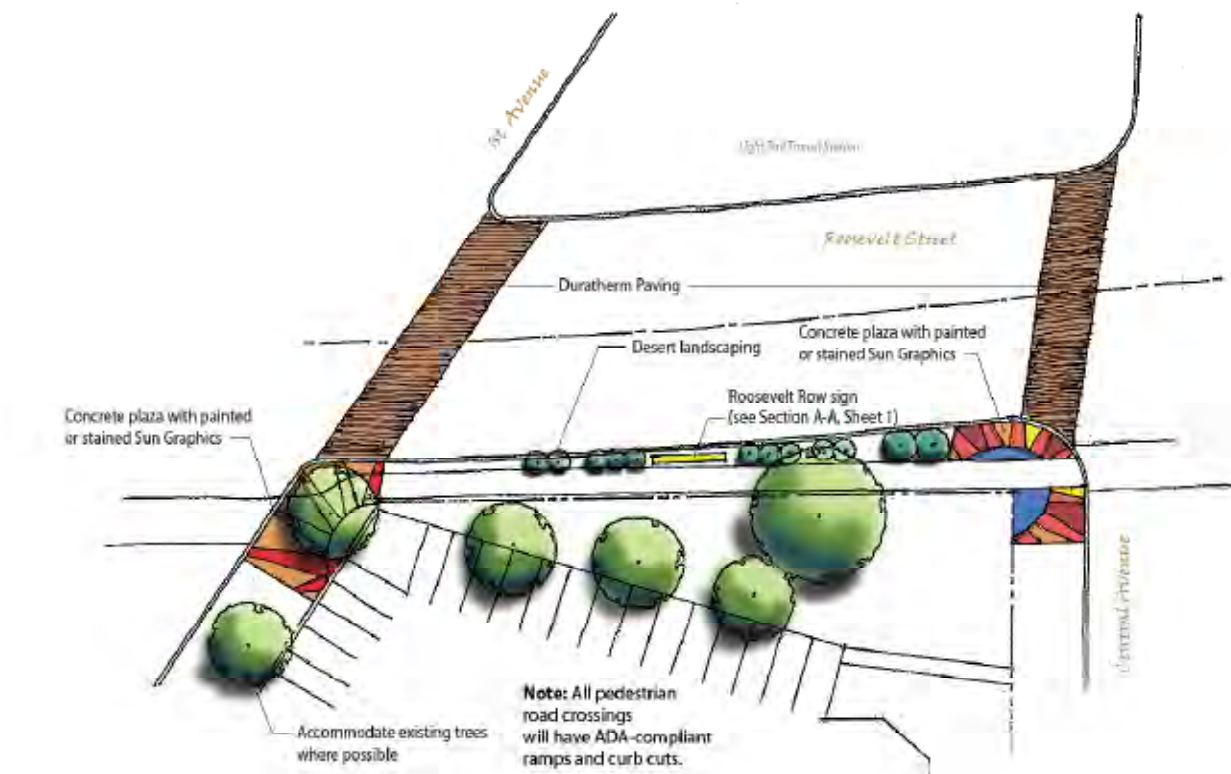
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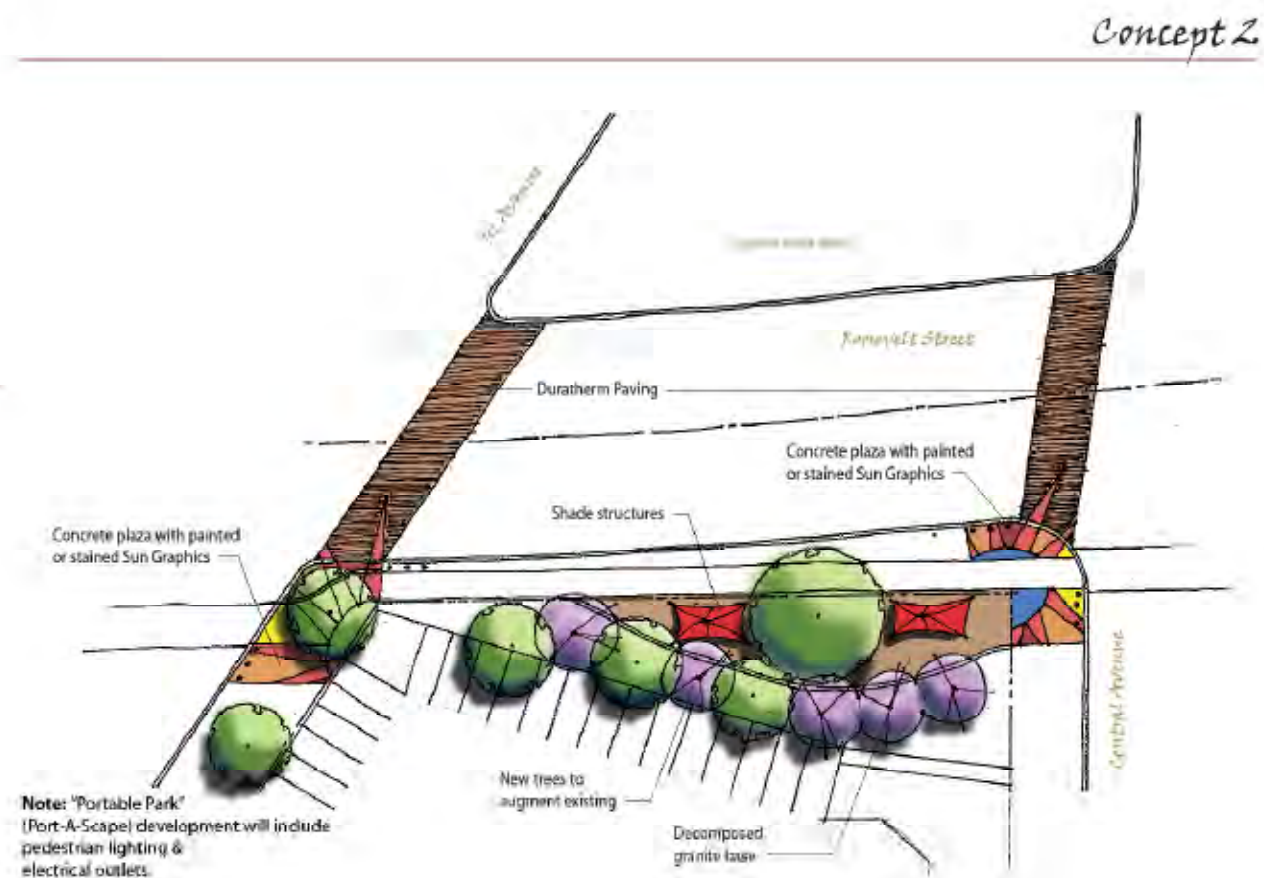
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Sheet 2 - 1st Drive to Central Avenue

Roosevelt Row



Concept I

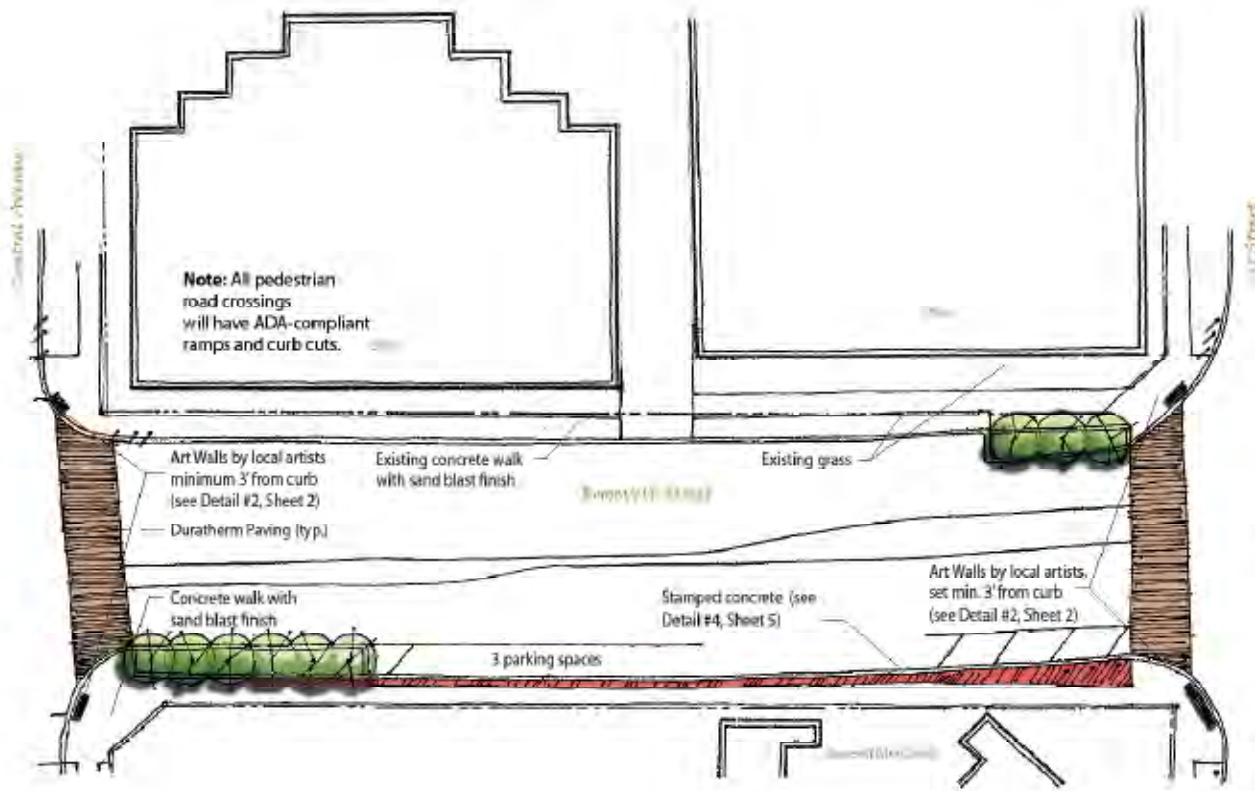


Concept 2

Sheet 3 - Central Avenue

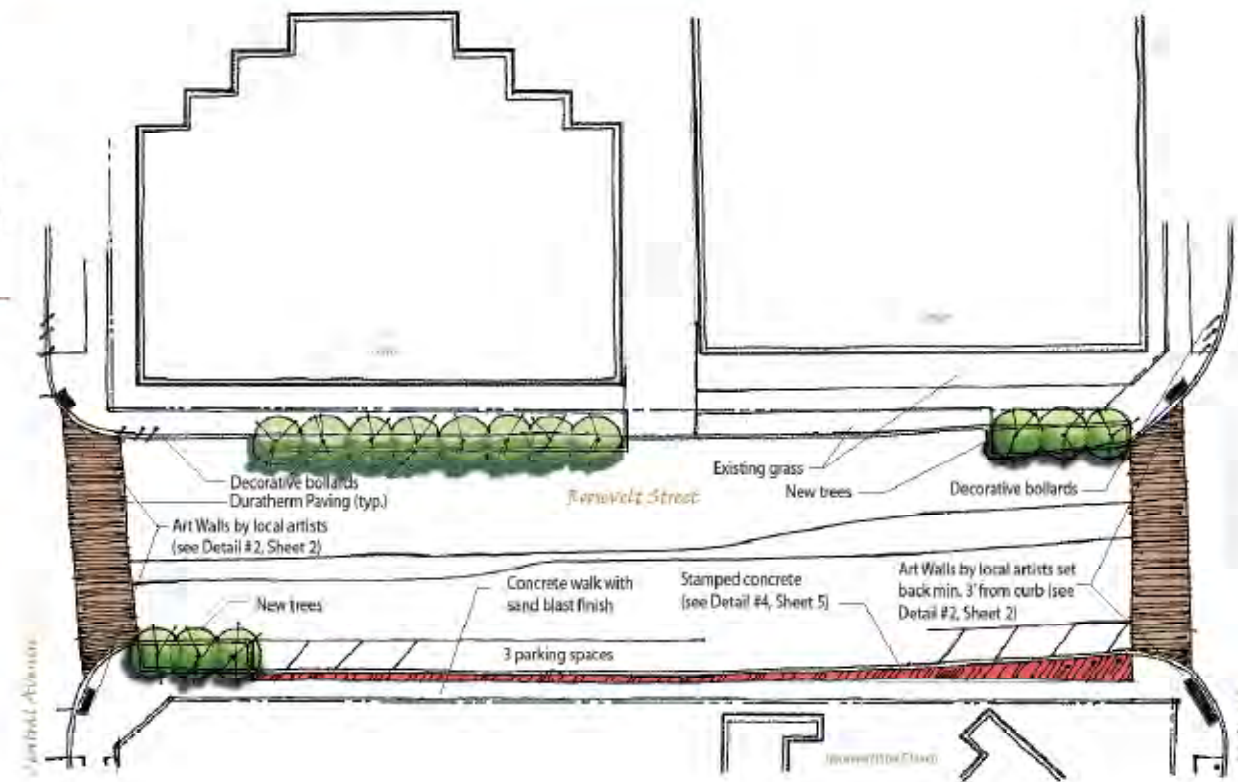
Roosevelt Row





Concept 1

Concept 2

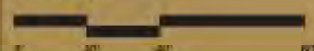


Sheet 4 - Central Avenue to 1st Street

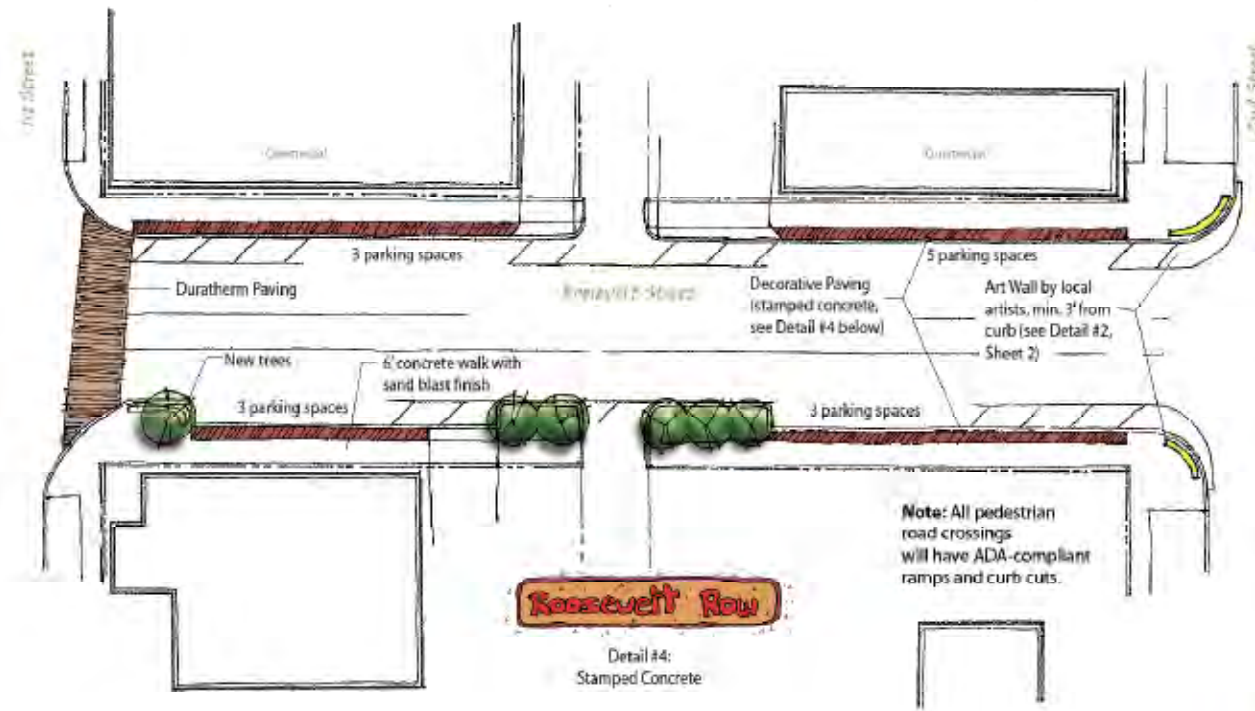
Roosevelt Row



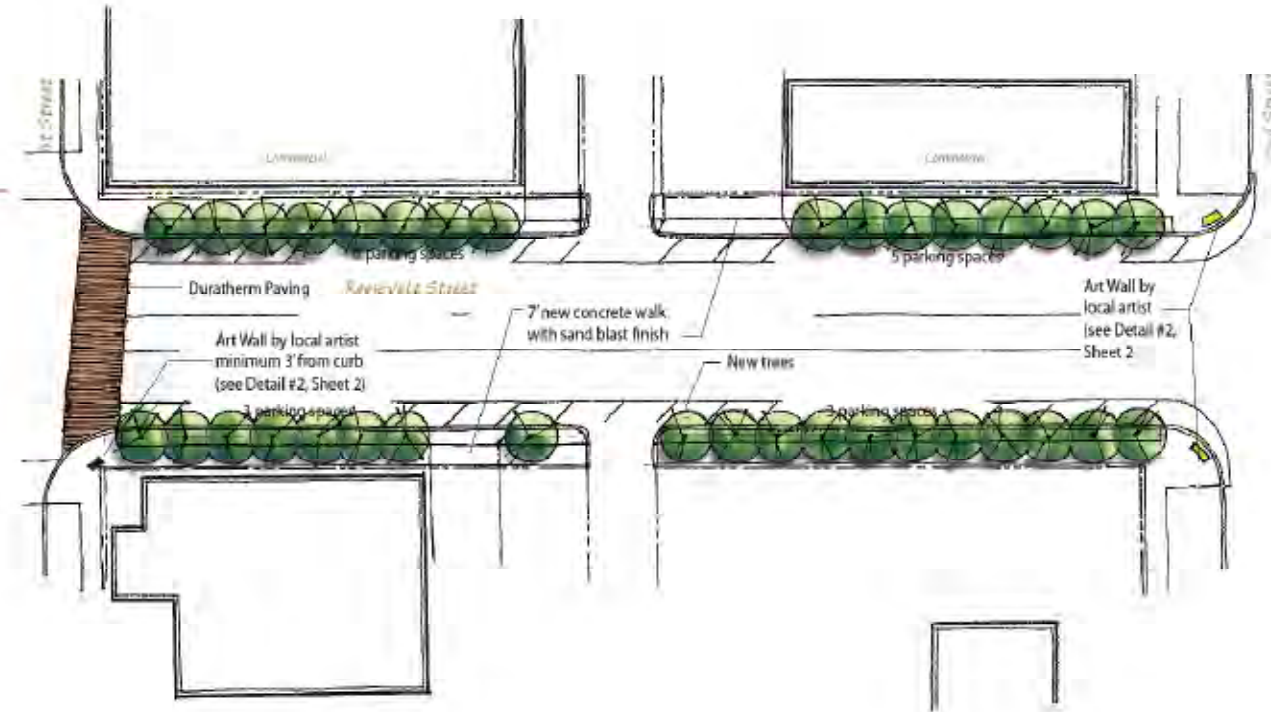
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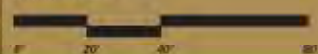
Concept 1



Concept 2



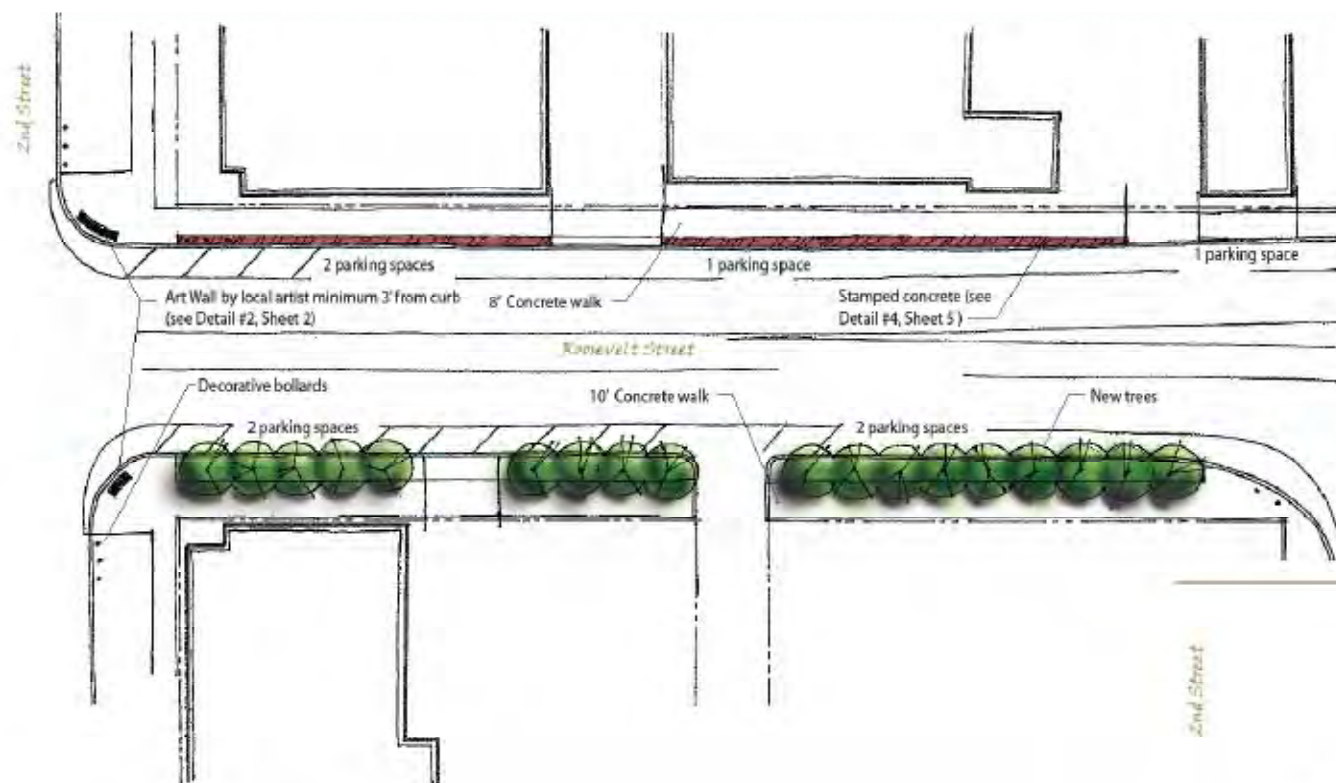
December 17, 2006



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Sheet 5 - 1st Street to 2nd Street

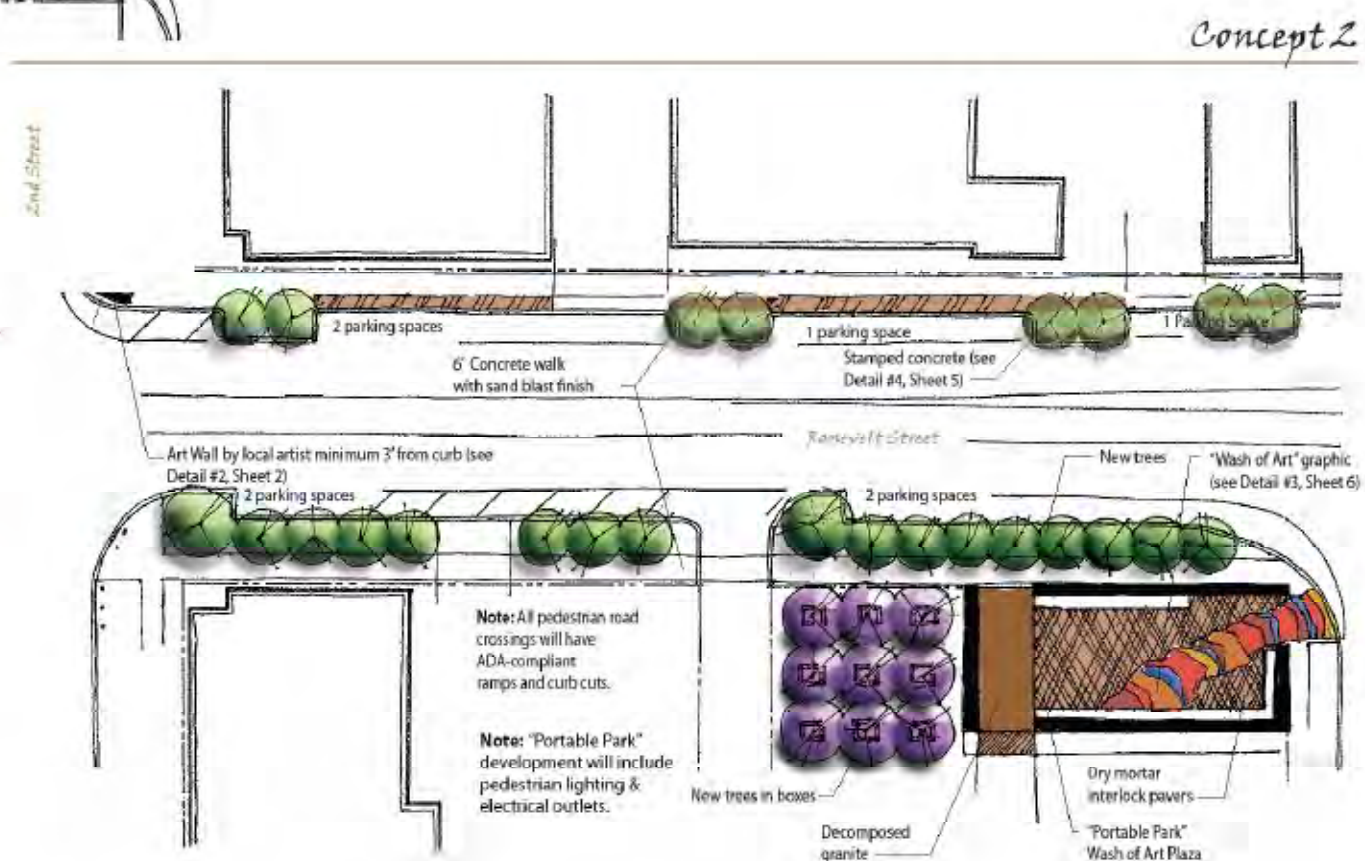
Roosevelt Row



Concept 1



Detail #3:
Wash of Art Concept
Note: Alternative theme could include "Canal of Art"

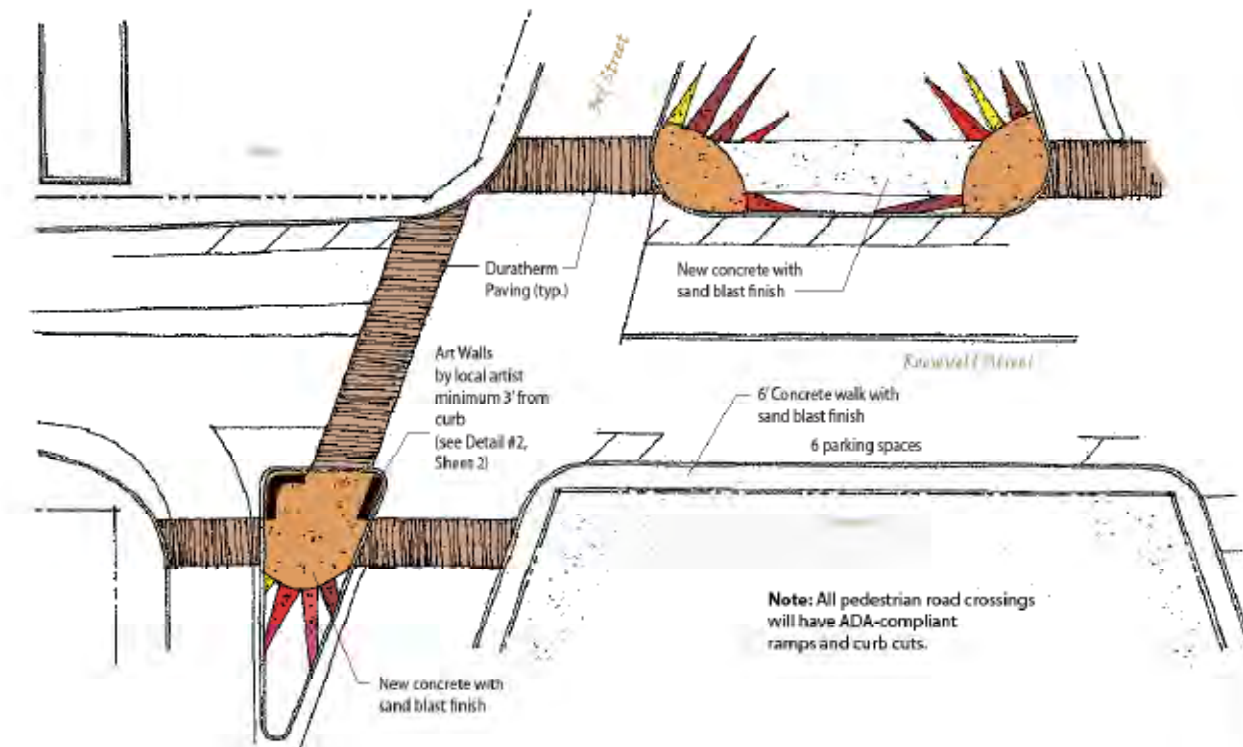


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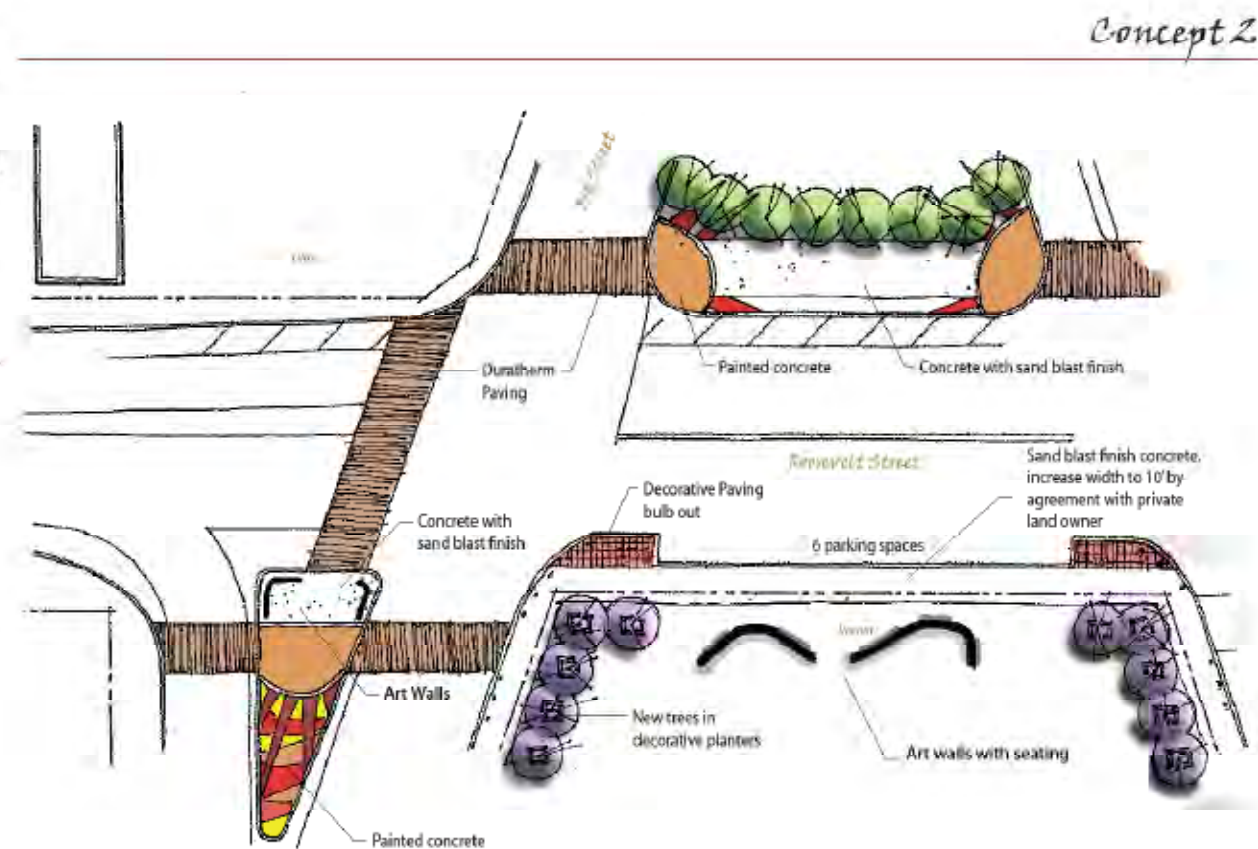
Sheet 6 - 2nd Street to 3rd Street

Roosevelt Row





Concept 1



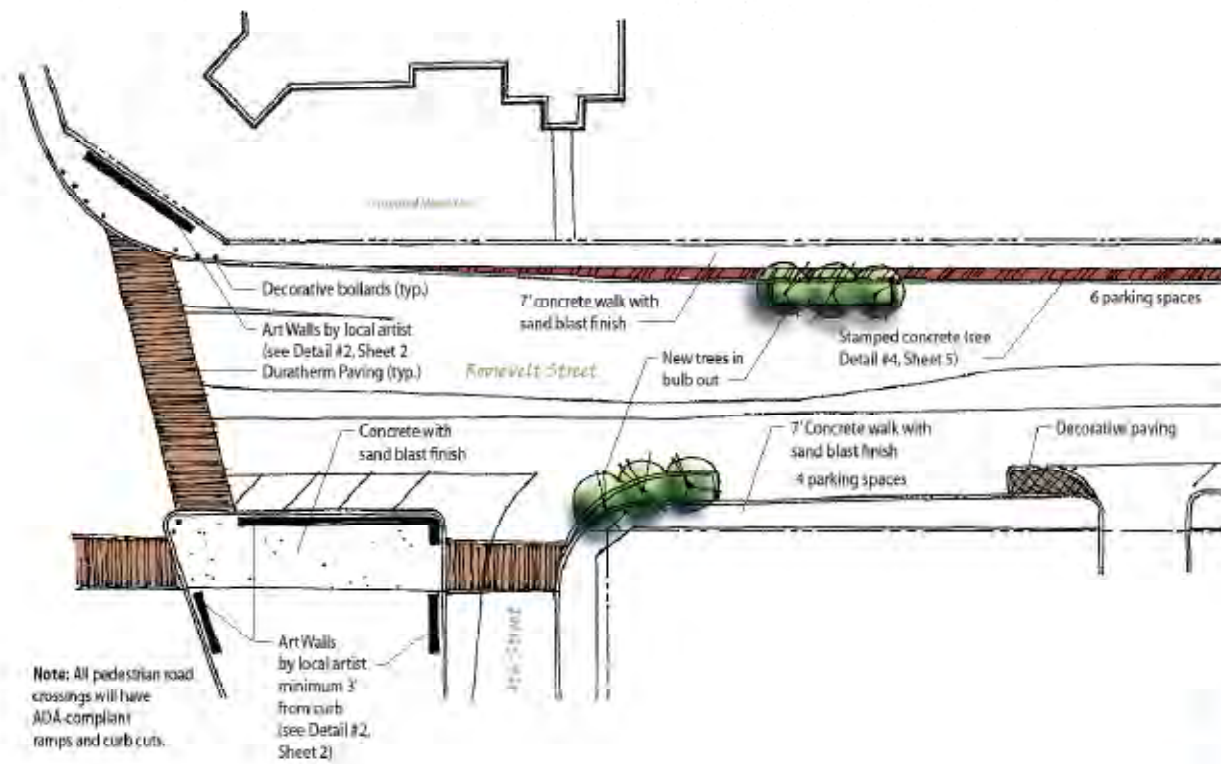
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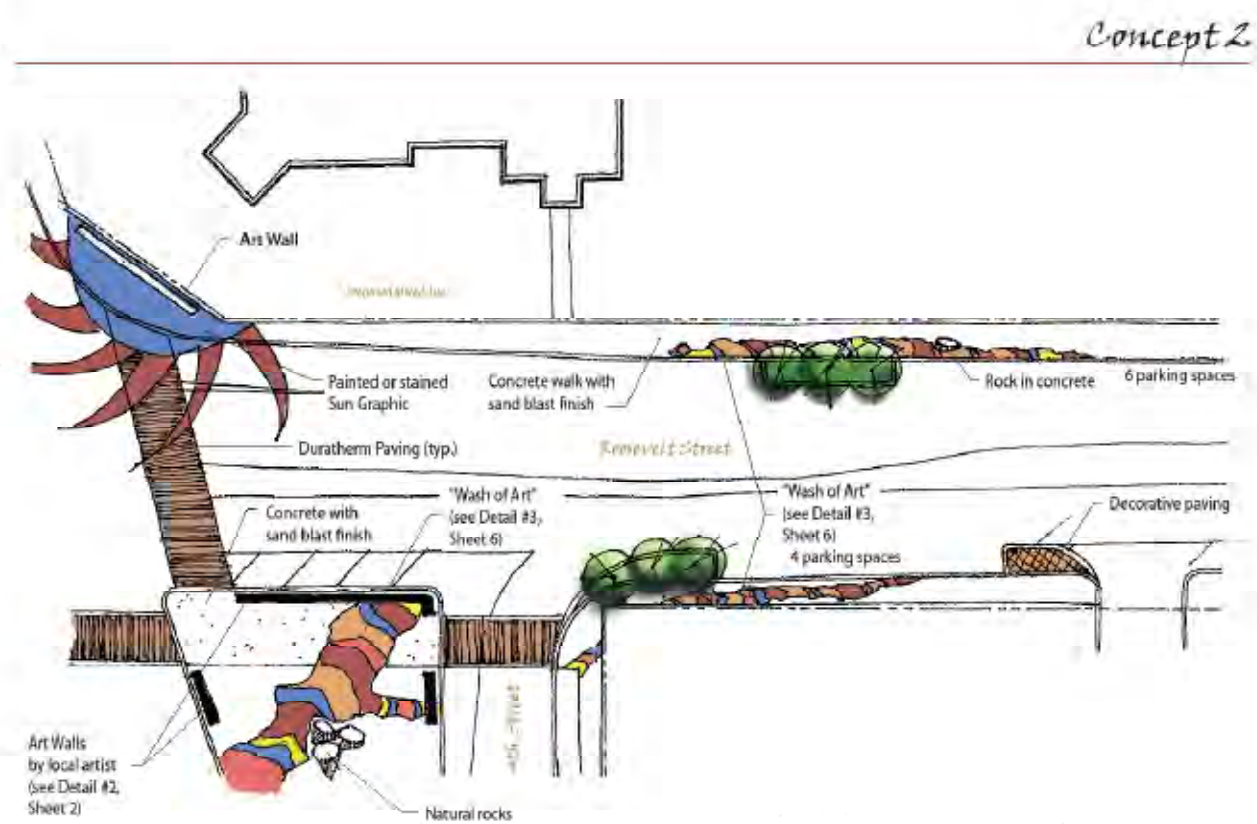
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Sheet 7 - 3rd Street Triangle

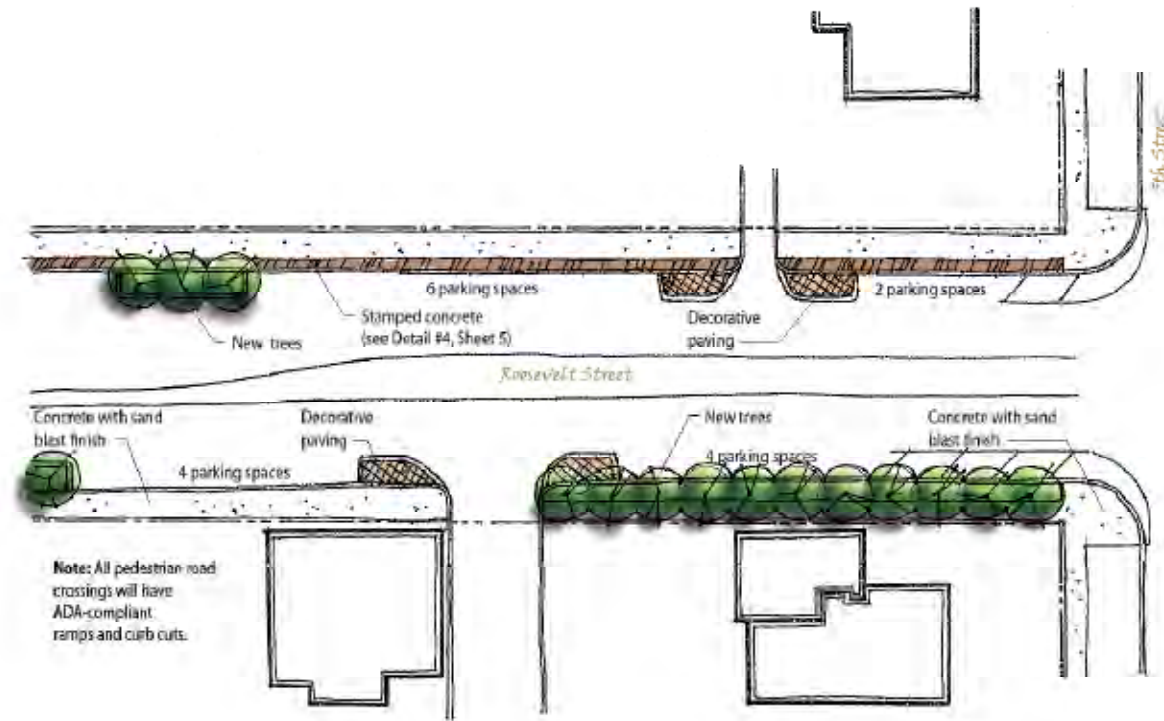
Roosevelt Row



Concept 1



Concept 2



Concept 1

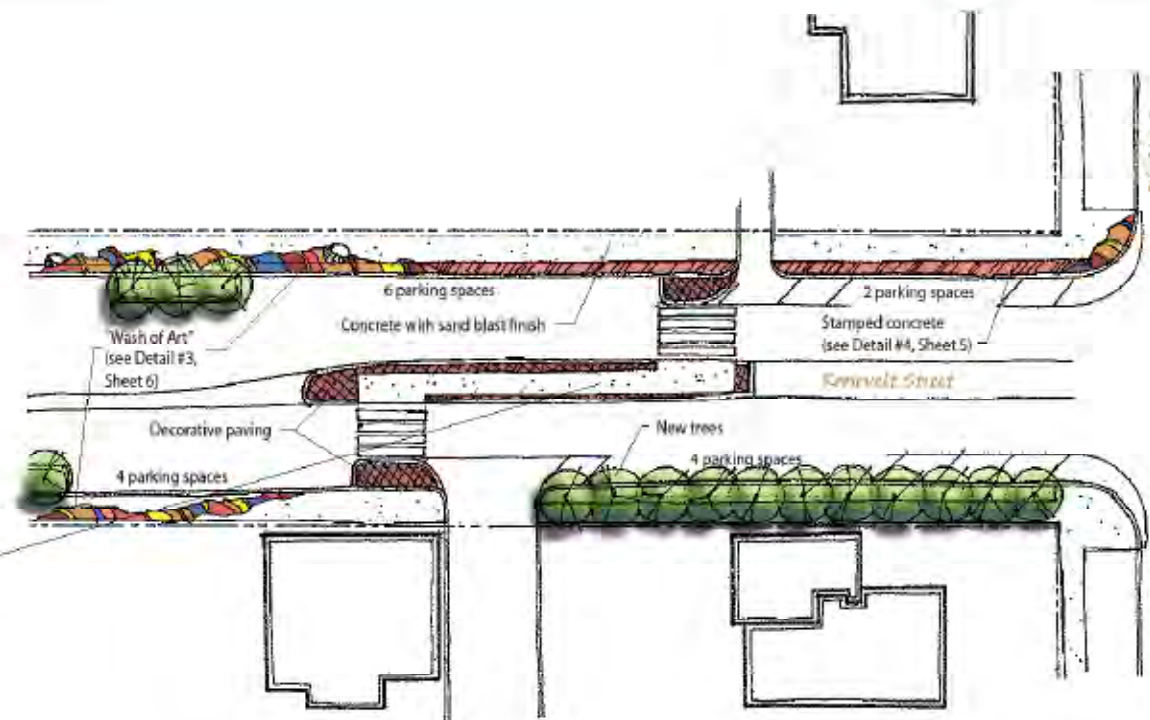


Detail #5 Enlargement
Traffic barriers around gateway feature



Detail #5:
Mid-Block Crossing

Concept 2

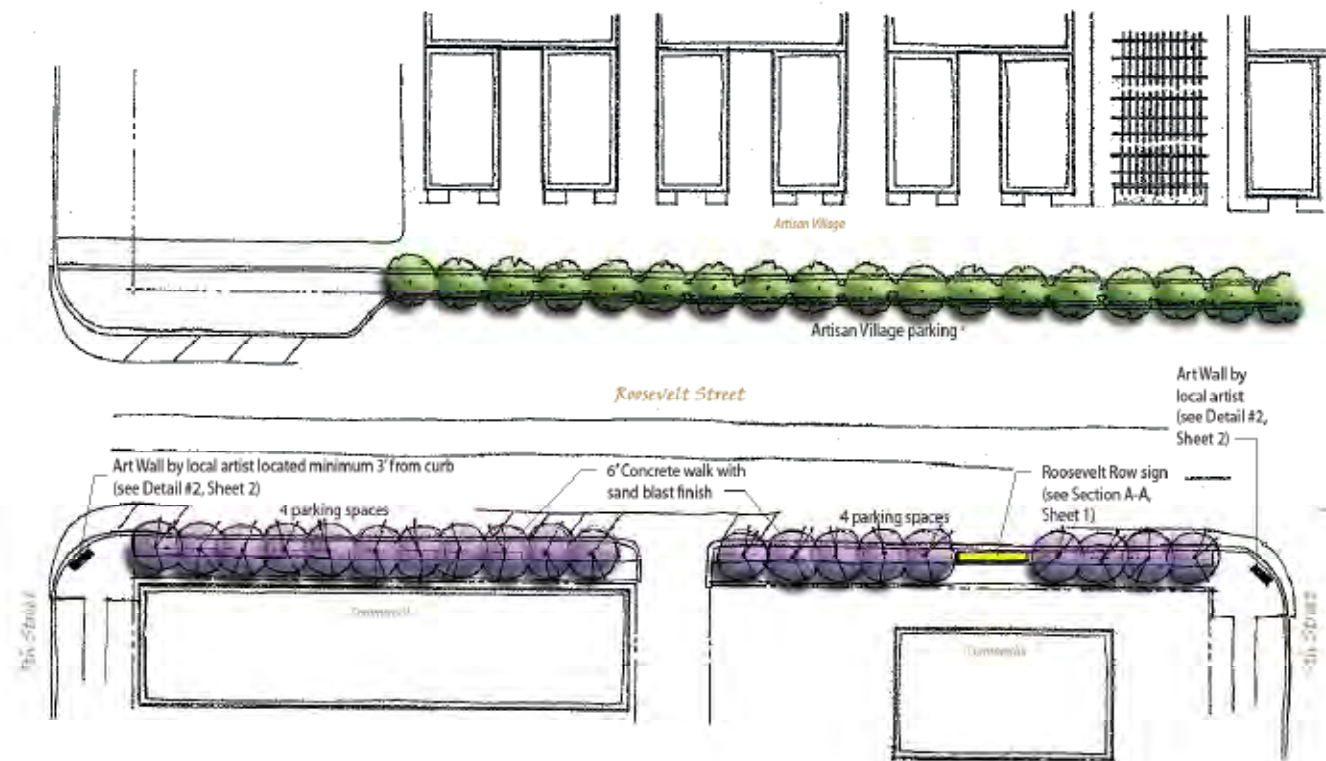


Sheet 9 - 4th Street to 5th Street

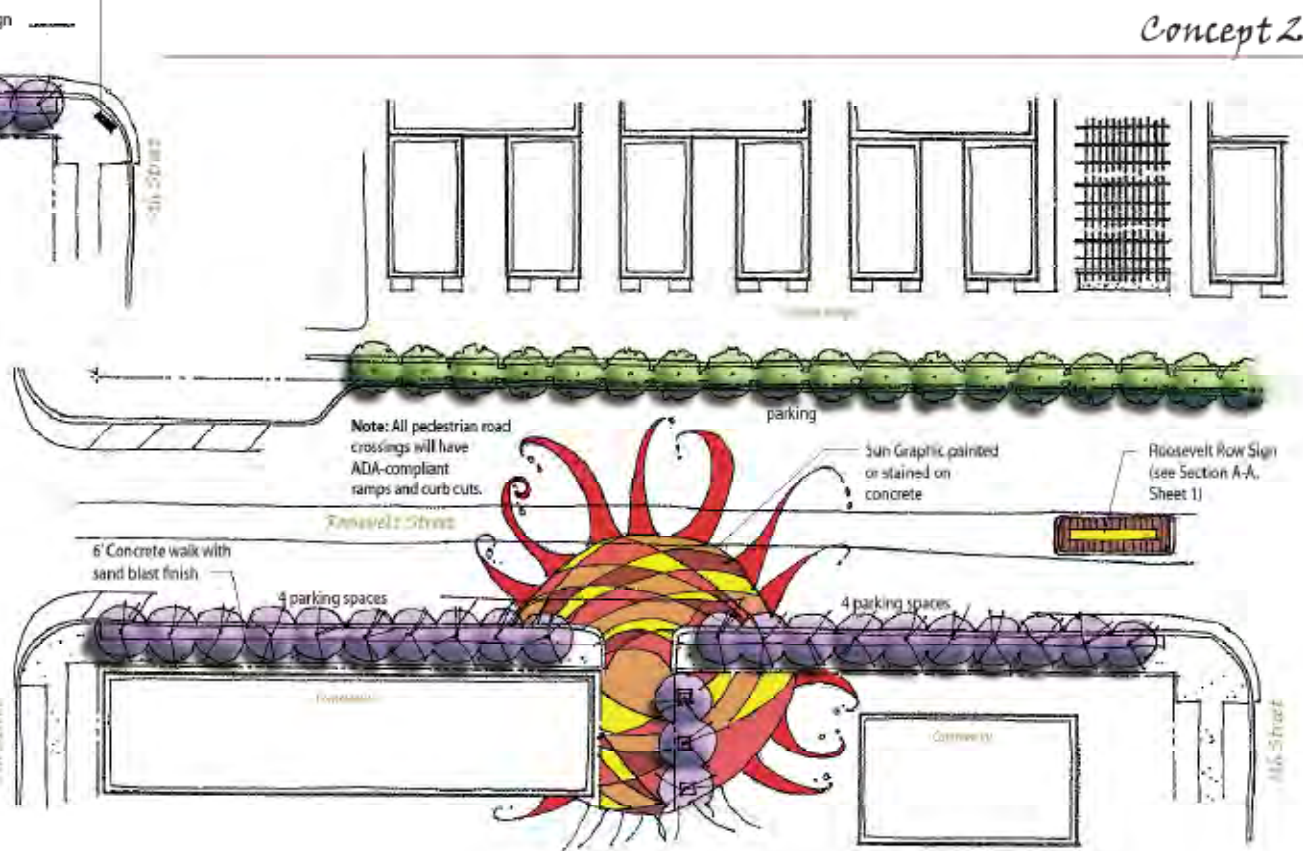
Roosevelt Row



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Concept 1



Concept 2

Sheet 10 - 5th Street to 6th Street

Roosevelt Row